# Author Search

⇒ FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 11:58:33 ON 30 SEP 2008
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FILE COVERS 1907 - 30 Sep 2008 VOL 149 ISS 14 FILE LAST UPDATED: 29 Sep 2008 (20080929/ED)

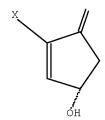
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'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

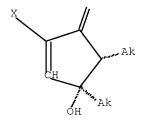
⇒ D STAT QUE L39 L18 STR



Structure attributes must be viewed using STN Express query preparation.

L21 242 SEA FILE=REGISTRY SSS FUL L18

L33 STR



#### ⇒ D IBIB ED ABS HITSTR L39 1

L39 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:80455 HCAPLUS Full-text

DOCUMENT NUMBER: 140:139470

TITLE:  $\alpha, \beta$ -unsaturated ketone as inhibitors of

ubiquitin isopeptidases that induce p53-independent

cell death and their therapeutic uses

INVENTOR(S): Mullally, James E.; Moos, Philip;

Fitzpatrick, Frank A.

PATENT ASSIGNEE(S): University of Utah Research Foundation, USA

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIND DATE			APPLICATION NO.					DATE						
	2004	0090	23		A2 A3		2004 2004		,	WO 2					2		718 <b>←</b>	<u>-</u>
***	W:						AU,		BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NΙ,	NO,	NZ,	OM,	
		PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ΤJ,	TM,	TN,	
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW				
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
		KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
		FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG	
CA	2492	523			A1		2004	0129	1	CA 2	003-	2492	523		2	0030	718 <b>&lt;</b>	-
ΑU	2003	2493	20		A1		2004	0209		AU 2003-249320					2	0030	718 <b>&lt;</b>	-
EP	1542	682			A2		2005	0622		EP 2	003-	7657	65		2	0030	718 <b>&lt;</b>	-
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		

US 20060106099 A1 20060518 US 2005-521570 20051107  $\leftarrow$  PRIORITY APPLN. INFO.: US 2002-396584P P 20020718  $\leftarrow$  WO 2003-US22576 W 20030718

ED Entered STN: 01 Feb 2004

AB A novel class of inhibitors of ubiquitin isopeptidases is disclosed that cause tumor cell death via mol. Mechanisms independent of p53. Specifically, compds. Containing an  $\alpha,\beta$ -unsatd. Ketone with a sterically accessible electrophilic  $\beta$ -carbon and related compds. Are identified herein. The  $\alpha$ -carbon of at least one  $\alpha,\beta$ -unsatd. Ketone moiety bears an electron withdrawing substituent which is selected from the group consisting of fluorine, chlorine, bromine, iodine, nitro, nitrilo and carboxy. The said carboxy group is an acid, ester of amide group. The said  $\alpha,\beta$ -unsatd. Ketone comprises a conjugated cyclopentene moiety. Pharmaceutical compns. Comprising the inhibitor compds. And methods of using the compds. For treating a variety of disease , such as tumor, inflammation, autoimmune disease, restenosis and dry eye, are disclosed.

IT 96055-64-0 96055-65-1 96055-66-2

96055-68-4 160791-07-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

 $(\alpha,\beta\text{-unsatd.}$  Ketone as inhibitors of ubiquitin isopeptidases that induce p53-independent cell death and their therapeutic uses)

RN 96055-64-0 HCAPLUS

CN Prosta-10,14-dien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 96055-65-1 HCAPLUS

CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-\_ydroxyl-9-oxo-, methyl ester, (5S,6S,7E,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

96055-68-4 HCAPLUS RN

Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-CN oxo-, methyl ester, (5S,6S,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

$$C1$$
 $R$ 
 $CH_2)$ 
 $Me$ 
 $CH_2)$ 
 $Me$ 

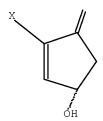
RN 160791-07-1 HCAPLUS

CN Prosta-10,14-dien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9oxo-, methyl ester, (5S,6S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## Structure Search

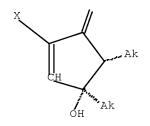
=> D STAT QUE L37 L18 STF



Structure attributes must be viewed using STN Express query preparation.

L21 242 SEA FILE=REGISTRY SSS FUL L18

L33 STR



Structure attributes must be viewed using STN Express query preparation.

L35 141 SEA FILE=REGISTRY SUB=L21 SSS FUL L33 L36 62 SEA FILE=HCAPLUS ABB=ON PLU=ON L35

L37 52 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND (PRY<=2002 OR

AY <= 2002 OR PY <= 2002)

=> S L37 NOT L39

L43 51 L37 NOT L39

=> D IBIB ED ABS HITSTR L43 1-51

L43 ANSWER 1 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:916991 HCAPLUS  $\underline{\text{Full-text}}$ 

DOCUMENT NUMBER: 136:232135

TITLE: Prostanoids: LXXX. Analogs of "marine" prostanoids.

(±)-11-chlorochlorovulone II

AUTHOR(S): Akhmetvaleev, R. R.; Baibulatova, G. M.; Nuriev, I.

F.; Shitikova, O. V.; Miftakhov, M. S.

CORPORATE SOURCE: Institute of Organic Chemistry, Ufa Scientific Center,

Russian Academy of Sciences, Ufa, 450054, Russia

SOURCE: Russian Journal of Organic Chemistry (Translation of

Zhurnal Organicheskoi Khimii) (2001), 37(8),

1083-1087

CODEN: RJOCEQ; ISSN: 1070-4280

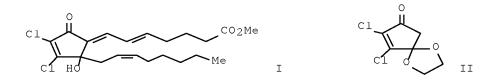
PUBLISHER: MAIK Nauka/Interperiodica Publishing

DOCUMENT TYPE: Journal English LANGUAGE:

OTHER SOURCE(S): CASREACT 136:232135

Entered STN: 20 Dec 2001

GΙ



Analog of chlorovulone II (I) containing an extra chlorine atom at C11 was AΒ synthesized starting with 1,4-dioxa-6,7-dichlorospiro[4,4]non-6-ene (II).

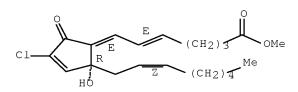
ΙT 100295-80-5P, Chlorovulone II

RL: SPN (Synthetic preparation); PREP (Preparation) (analog; preparation of chlorovulone II analog from 1,4-dioxa-6,7dichlorospiro[4,4]non-6-ene)

100295-80-5 HCAPLUS RN

Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl CN ester, (5E,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.



REFERENCE COUNT: THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 2 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:785496 HCAPLUS Full-text

DOCUMENT NUMBER: 136:67131

TITLE: New halogenated marine prostanoids with cytotoxic

activity from the Okinawan soft coral Clavularia

viridis

Watanabe, Kinzo; Sekine, Miyuki; Takahashi, Haruko; AUTHOR(S):

Iquchi, Kazuo

CORPORATE SOURCE: School of Life Science, Tokyo University of Pharmacy

and Life Science, Hachioji, Tokyo, 192-0392, Japan

SOURCE: Journal of Natural Products (2001), 64(11),

1421-1425

CODEN: JNPRDF; ISSN: 0163-3864

American Chemical Society PUBLISHER:

DOCUMENT TYPE: Journal LANGUAGE: English Entered STN: 30 Oct 2001

GΙ

AΒ Five new halogenated prostanoids (I-V) were isolated from the Okinawan soft coral Clavularia viridis. The gross structure of I was elucidated mainly on the basis of NMR spectral data. The relative and absolute configurations were determined by anal. of NOESY and CD data, chemical conversion, and the modified Mosher's method. The structures of II-IV and V were deduced by comparison of their spectral data with those of I. Compound I demonstrated cytotoxic activity.

160791-09-3, Punaglandin 8 ΙT

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (halogenated marine prostanoids with cytotoxic activity from Okinawan soft coral Clavularia viridis)

160791-09-3 HCAPLUS RN

CN Prosta-5,10,14-trien-1-oic acid, 7-(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7S,14Z) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

C1 
$$\xrightarrow{R}$$
 OH  $\xrightarrow{OAc}$   $\xrightarrow{CH2)3}$  OME

ΙT 383414-92-4P

> RL: NPO (Natural product occurrence); PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(halogenated marine prostanoids with cytotoxic activity from Okinawan soft coral Clavularia viridis)

383414-92-4 HCAPLUS RN

CN Prosta-5,10,14-trien-1-oic acid, 7-(acetyloxy)-12-hydroxy-10-iodo-9-oxo-, methyl ester, (5Z,7S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

IT 383414-93-5P 383414-94-6P 383414-95-7P 383414-96-8P

RL: NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(halogenated marine prostanoids with cytotoxic activity from Okinawan soft coral Clavularia viridis)

RN 383414-93-5 HCAPLUS

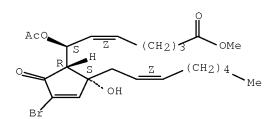
CN Prosta-5,10,14-trien-1-oic acid, 7-(acetyloxy)-12-hydroxy-10-iodo-9-oxo-, methyl ester, (5E,7S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

RN 383414-94-6 HCAPLUS

CN Prosta-5,10,14-trien-1-oic acid, 7-(acetyloxy)-10-bromo-12-hydroxy-9-oxo-, methyl ester, (5Z,7S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.



RN 383414-95-7 HCAPLUS

CN Prosta-5,10,14-trien-1-oic acid, 7-(acetyloxy)-10-bromo-12-hydroxy-9-oxo-, methyl ester, (5E,7S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

RN 383414-96-8 HCAPLUS

CN Prosta-5,10,14-trien-1-oic acid, 7-(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

C1 
$$\xrightarrow{\text{OAc}}$$
  $\xrightarrow{\text{CCH}_2}$   $\xrightarrow{\text{O}}$   $\xrightarrow{\text{OMe}}$   $\xrightarrow{\text{CCH}_2}$   $\xrightarrow{\text{Me}}$   $\xrightarrow{\text{Me}}$ 

IT 105343-03-1P, Iodovulone I 383414-97-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation from 7-acetoxy-7,8-dihydroiodovulone I)

RN 105343-03-1 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 12-hydroxy-10-iodo-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 383414-97-9 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 12-hydroxy-10-iodo-9-oxo-, methyl ester, (5Z,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

$$Z$$
 (CH2)  $Z$  OMe  $Z$  (CH2)  $Z$ 

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 3 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1998:537512 HCAPLUS Full-text

DOCUMENT NUMBER: 129:316062

ORIGINAL REFERENCE NO.: 129:64499a,64502a

TITLE: Application of a novel carbonyl ene reaction: total

syntheses of phyllanthocin and chlorovulone II

AUTHOR(S): Zhu, Shuren

CORPORATE SOURCE: Rice Univ., Houston, TX, USA

SOURCE: (1998) 163 pp. Avail.: UMI, Order No.

DA9827467

From: Diss. Abstr. Int., B 1998, 59(3), 1121

DOCUMENT TYPE: Dissertation LANGUAGE: English ED Entered STN: 25 Aug 1998

AB Unavailable

IT 100295-80-5P, Chlorovulone II

RL: SPN (Synthetic preparation); PREP (Preparation)

(total syntheses of phyllanthocin and chlorovulone II via carbonyl ene

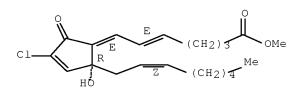
reaction)

RN 100295-80-5 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 4 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1998:355711 HCAPLUS Full-text

DOCUMENT NUMBER: 129:122470

ORIGINAL REFERENCE NO.: 129:25097a,25100a

TITLE: A carbohydrate approach to 4-hydroxy-2-cyclopentenone

moiety of antitumor prostanoid punaglandin IV via

alkylation of ester uronate

AUTHOR(S): Kuhn, Cyrille; Florent, Jean-Claude

CORPORATE SOURCE: Unite Mixte Recherche, Inst. Curie-CNRS, Paris, 75248,

Fr.

SOURCE: Tetrahedron Letters (1998), 39(24),

4247-4250

CODEN: TELEAY; ISSN: 0040-4039

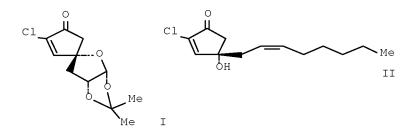
PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 129:122470

ED Entered STN: 12 Jun 1998

GΙ



AB An efficient and stereoselective synthesis of chiral precursor I of 2-chloro-4-hydroxy-4-alkyl-2-cyclopentenone, e.g. II, has been realized by alkylation of a sugar Me uronate derived from 1,2-O-isopropylidene- $\alpha$ - D-glucose with an acetonyl equivalent, and subsequent intramol. Wittig reaction.

IT 96055-66-2P, Punaglandin IV

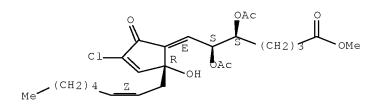
RL: PNU (Preparation, unclassified); PREP (Preparation) (carbohydrate approach to the hydroxycyclopentenone moiety of punaglandin IV via alkylation of an ester uronate)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 5 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1998:355693 HCAPLUS Full-text

DOCUMENT NUMBER: 129:122469

ORIGINAL REFERENCE NO.: 129:25097a,25100a

TITLE: Cross-conjugated cyclopentenone prostaglandins

synthesis of  $\Delta 7-10$ -chloro-15-deoxy PGA1 ethyl

ester

AUTHOR(S): Tius, Marcus A.; Busch-Petersen, Jakob; Yamashita,

Mason

CORPORATE SOURCE: Dep. Chem., Univ. Hawaii, Honolulu, HI, 96822, USA

SOURCE: Tetrahedron Letters (1998), 39(24),

4219-4222

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 129:122469

ED Entered STN: 12 Jun 1998

GΙ

AB The cationic cyclopentannelation reaction, e.g. cyclization of
MeOCH2OCH:C:CH(CH2)4C.tplbond.COEt to cyclopentenone I, provides an
unconventional but highly efficient strategy for the synthesis of unsatd.
prostanoids and their analogs, e.g. II [R = OH, OAc, OC(:S)NMe2, Cl]. II were
evaluated against KB and LoVo cell lines [IC50 = 80 μM (KB), 101 μM (LoVo) {I;
R = OH}; IC50 = 53 μM (KB), 49 μM (LoVo) {I; R = OAc}; IC50 = 0.13 μM (KB),
1.3 μM (LoVo) {I; R = OC(:S)NMe2}; IC50 = 7 μM (KB), 57 μM (LoVo) {I; R =
Cl}].

IT 96055-66-2DP, Punaglandin 4, analog

RL: PNU (Preparation, unclassified); PREP (Preparation) (synthesis of cross-conjugated cyclopentenone prostaglandins via a cationic cyclopentannelation reaction)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

C1 
$$R$$
 OH OAC  $CH_2$ ) 4  $Z$  OME

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 6 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1998:218250 HCAPLUS Full-text

DOCUMENT NUMBER: 128:270449

ORIGINAL REFERENCE NO.: 128:53537a,53540a

TITLE: A novel chloroenone synthesis with

dichloromethylenedimethylammonium chloride: synthesis

of 12-deoxychlorovulone analogs

AUTHOR(S): Chen, Yung-Fa

CORPORATE SOURCE: Product Development Dep., Refining and Manufacturing

Res. Cent., Chinese Petroleum Corp., Chiayi, Taiwan

SOURCE: Taiwan Kexue (1997), 50(1), 92-120

CODEN: TKHSAU; ISSN: 0015-7791

PUBLISHER: Formosan Association for Advancement of Science

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 128:270449

ED Entered STN: 18 Apr 1998

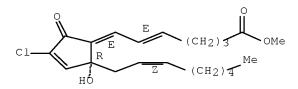
GΙ

$$C1$$
 $R$ 

$$\stackrel{\text{Me}}{\longrightarrow} \stackrel{\circ}{\longrightarrow} \stackrel{\text{H}}{\longrightarrow} \stackrel{\circ}{\longrightarrow} \underset{R1}{\longrightarrow} R$$

- AB A variety of 12-deoxychlorovulone II analogs such as I [R = (CH2)5CO2Me, R1 = H, Me, CHMe2, (CH2)3Me, (CH2)7Me; R = (E)-CH:CH(CH2)3CO2Me, C.tplbond.C(CH2)3CO2Me, R1 = (CH2)7Me] were prepared by acid catalyzed deprotection of the corresponding acetonides II followed by nucleophilic chloride substitution catalyzed by Viehe's salt, Cl2C:N+Me2Cl-, in the presence of Et3N.
- IT 100295-80-5DP, Chlorovulone II, 12-deoxy analogs
  RL: SPN (Synthetic preparation); PREP (Preparation)
  (synthesis of 12-deoxychlorovulone II analogs via chloride nucleophilic substitution reaction catalyzed by Viehe's salt)
- RN 100295-80-5 HCAPLUS
- CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 7 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1998:143663 HCAPLUS Full-text

DOCUMENT NUMBER: 128:127831

ORIGINAL REFERENCE NO.: 128:25107a,25110a

TITLE: Practical Synthesis of (±)-Chlorovulone II

AUTHOR(S): Ciufolini, Marco A.; Zhu, Shuren

CORPORATE SOURCE: Department of Chemistry, Rice University, Houston, TX,

77005-1892, USA

SOURCE: Journal of Organic Chemistry (1998), 63(5),

1668-1675

CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 128:127831

ED Entered STN: 10 Mar 1998

GΙ

AB A total synthesis of (±)-chlorovulone II (I) that is 10 steps shorter than the best alternative currently available (nine vs 19 steps) is described. The key event of the synthesis is an aldol addition of the enolate of Et acetate into 4-cyclopentene-1,3-dione, a substance that has received little attention as an educt for prostanoid synthesis and for which little is known about carbonyl 1,2-addition with enolates. In addition, the chemical and stereochem. details of a route to a key intermediate toward the title compound that involves a carbonyl-ene reaction and a radical addition to an aldehyde carbonyl is provided.

IT 201802-89-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (practical synthesis of chlorovulone II via an aldol addition to cyclopentenedione)

RN 201802-89-3 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl

ester, (5E, 7E, 12\xi, 14Z) - (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$C1$$
 $E$ 
 $CH_2)$ 
 $Me$ 
 $Me$ 
 $CH_2)$ 
 $Me$ 

REFERENCE COUNT: 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 8 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:760118 HCAPLUS Full-text

DOCUMENT NUMBER: 128:88377

ORIGINAL REFERENCE NO.: 128:17265a,17268a

TITLE: A remarkable ene-like reaction: development and

synthetic applications

AUTHOR(S): Ciufolini, Marco A.; Deaton, Melissa V.; Zhu, Shuren;

Chen, Mingving

CORPORATE SOURCE: Department of Chemistry, Rice University, Houston, TX,

77005-1892, USA

SOURCE: Tetrahedron (1997), 53(48), 16299-16312

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 128:88377

ED Entered STN: 06 Dec 1997

AB A catalytic ene-like reaction of aldehydes with those vinyl ethers that display the oxygen functionality at the central carbon of an allylic system, e.g., 2-methoxypropene, was discussed in detail. The reaction was promoted by 0.05 equivalent of the 1:1 complex of Yb(fod)3 and acetic acid, and it formed the centerpiece of the synthesis of chlorovulone II, mitomycinoids and phyllanthocin.

IT 100295-80-5P, Chlorovulone II

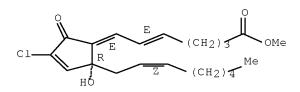
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 100295-80-5 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 74 THERE ARE 74 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L43 ANSWER 9 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1995:228132 HCAPLUS Full-text

DOCUMENT NUMBER: 122:102045

ORIGINAL REFERENCE NO.: 122:19127a,19130a

TITLE: The punaglandins: 10-chloroprostanoids from the

octocoral Telesto riisei

Baker, Bill J.; Scheuer, Paul J. AUTHOR(S):

Dep. Chem., Univ. Hawaii at Manoa, Honolulu, HI, CORPORATE SOURCE:

96822, USA

SOURCE: Journal of Natural Products (1994), 57(10),

1346-53

CODEN: JNPRDF; ISSN: 0163-3864

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English Entered STN: 06 Dec 1994

GΙ

AΒ Telesto riisei, an octocoral from Hawaii, produces nineteen highly functionalized prostanoids, the punaglandins, which are characterized by various oxygenation at C-5, -6, -7, and -12, and a 10-chloro-9- cyclopentenone moiety. The absolute stereochem. of the 10-chloroprostanoids, including Punaglandin 5 (I), is epimeric to that of the Pacific marine prostanoids without halogen. The punaglandins have shown anti-inflammatory and antitumor activity. A synthetic 10-thiomethyl derivative enhances in vivo mineralization in human osteoblasts.

96055-63-9, Punaglandin 1 96055-64-0, Punaglandin 2 96055-65-1, Punaglandin 3 96055-66-2, Punaglandin 4 96055-67-3 96055-68-4 160791-06-0, Punaglandin 5 160791-07-1, Punaglandin 6 160791-08-2, Punaglandin 7 160791-09-3, Punaglandin 8

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses) (punaglandin isolation and structural characterization and

antineoplastic activity from Hawaiian octocoral)

RN 96055-63-9 HCAPLUS

CN Prosta-10,14,17-trien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 96055-64-0 HCAPLUS

CN Prosta-10,14-dien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 96055-65-1 HCAPLUS

CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

C1 
$$\frac{C}{E}$$
  $\frac{C}{E}$   $\frac$ 

RN 96055-67-3 HCAPLUS

CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 96055-68-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 160791-06-0 HCAPLUS

CN Prosta-10,14,17-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160791-07-1 HCAPLUS

CN Prosta-10,14-dien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 160791-08-2 HCAPLUS

CN Prosta-5,10,14,17-tetraen-1-oic acid, 7-(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7S,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 160791-09-3 HCAPLUS

CN Prosta-5,10,14-trien-1-oic acid, 7-(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7S,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

L43 ANSWER 10 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1994:533752 HCAPLUS Full-text

DOCUMENT NUMBER: 121:133752

ORIGINAL REFERENCE NO.: 121:24173a,24176a

TITLE: Natural products synthesis by retro-Diels-Alder

reaction. VIII. A concise stereospecific formal

synthesis of tetrahydrochlorovulone

AUTHOR(S): Liu, Zhiyu; Yang, Jiying; Zhang, Jianjun; Tao,

Xueliang

CORPORATE SOURCE: Shanghai Inst. Org. Chem., Chin. Acad. Sci., Shanghai,

200032, Peop. Rep. China

SOURCE: Chinese Chemical Letters (1993), 4(11),

947-8

CODEN: CCLEE7; ISSN: 1001-8417

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 121:133752

ED Entered STN: 17 Sep 1994

GΙ

AB A potent antineoplastic tetrahydrochlorovulone I was synthesized by retro-Diels Alder reaction of tricyclic ketone II to give cyclopentenone III as a key step.

IT 102355-12-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (stereospecific preparation of, via retro Diels-Alder)

RN 102355-12-4 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(7E,12\xi)$ - (9CI) (CA INDEX NAME)

Double bond geometry as shown.

C1 
$$(CH_2)_5$$
 OMe

L43 ANSWER 11 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1994:533585 HCAPLUS Full-text

DOCUMENT NUMBER: 121:133585

ORIGINAL REFERENCE NO.: 121:24141a, 24144a

TITLE: Preparation of 4-hydroxy-2-cyclopentenone derivative

and carcinostatic and osteogenesis promoter containing

the same

INVENTOR(S): Furuya, Minoru; Sugiura, Satoshi; Hazato, Atsuo

PATENT ASSIGNEE(S): Teijin Ltd., Japan SOURCE: PCT Int. Appl., 84 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					KIND DATE			APPLICATION NO.			DATE				
 WO	9405	619			A1	_	1994	0317	WO	1993-	 JP1266		1	 993090	- 7 ·	<
	W:	ΑU,	CA,	JP,	US											
	RW:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, G	R, IE,	IT, L	U, MC,	NL,	PT, S	Ε	
AU	9349	829			A		1994	0329	AU	1993-	49829		1	993090	7 .	<
AU	6783	89			В2		1997	0529								
EP	6597	28			A1		1995	0628	EP	1993-	919623		1	993090	7 .	<
	R:	CH,	DE,	FR,	GB,	IT,	, LI,	NL,	SE							
CA	2144	313			С		1999	0330	CA	1993-	214431	3	1	993090	7 .	<
US	5675	031			A		1997	1007	US	1995-	397176		1	995030	8 .	<
PRIORIT	Y APP	LN.	INFO	.:					JP	1992-	241998		A 1	992091	0 .	<
									WO	1993-	JP1266		W 1	993090	7 .	<

OTHER SOURCE(S): MARPAT 121:133585

ED Entered STN: 17 Sep 1994

GΙ

An optically active compound represented by general formula [I; Y = H, halo; A AB = OH, C2-7 acyloxy, C2-5 alkoxycarbonyloxy, or C1-7 sulfonyloxy and B = H, or alternatively A and B are combined together to represent a bond; R2 = C4-10alicyclic hydrocarbon, C6-10 aromatic hydrocarbon or C1-9 heterocyclic hydrocarbon group each of which may be substituted; R3 = H or C1-10 aliphatic hydrocarbon, C4-10 alicyclic hydrocarbon or C6-10 aromatic hydrocarbon group each of which may be substituted; R4 = H, C1-4 alkyl, C2-7 acyl, C2-5alkoxycarbonyl, tri(C1-7 hydrocarbyl)silyl or a group which forms an acetal bond together with the oxygen atom to which R4 is bonded; R5 = H or C1-10aliphatic hydrocarbon or C4-10 alicyclic hydrocarbon group each of which may be substituted] or a mixture thereof, useful as anticancer agents and for the treatment of osteoporosis and osteomalacia, are prepared A carcinostatic and osteogenesis promoter each containing the hydroxycyclopentenone derivative I as the active ingredient is claimed. Thus, (dL)-4-hydroxy-2-cyclopentenone derivative (II; R = H) was treated with LiN(CHMe2)2 in THF at  $-78^{\circ}$  and condensed with cyclohexanecarbaldehyde to give 67% II (R = Q) which was

mesylated by MeSO2Cl in pyridine followed by elimination reaction using DBU in CH2Cl2 to give (cyclohexylmethylene)cyclopentenone derivative (III; R = cyclohexyl, R1 = Me3Si, X = Cl) and its isomer. Benzylidenecyclopentenone III (R = 4-methoxycarbonylphenyl, R1 = H, X = Cl) showed IC50 of 0.004  $\mu$ g/mL for inhibiting L1210 leukemia cells.

IT 157121-52-3P 157121-53-4P 157121-54-5P 157121-55-6P 157121-56-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as anticancer agent and osteogenesis promoter)

RN 157121-52-3 HCAPLUS

CN Benzoic acid, 4-[[4-chloro-2-hydroxy-5-oxo-2-(4-phenoxybutyl)-3-cyclopenten-1-ylidene]methyl]-, methyl ester (CA INDEX NAME)

RN 157121-53-4 HCAPLUS

CN 2-Cyclopenten-1-one, 2-chloro-5-[[4-(dimethylamino)phenyl]methylene]-4-hydroxy-4-(4-phenoxybutyl)- (CA INDEX NAME)

RN 157121-54-5 HCAPLUS

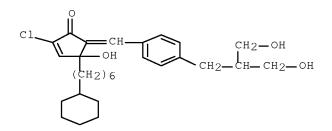
CN Benzoic acid, 4-[[4-fluoro-2-hydroxy-5-oxo-2-(4-phenoxybutyl)-3-cyclopenten-1-ylidene]methyl]-, methyl ester (CA INDEX NAME)

RN 157121-55-6 HCAPLUS

CN 2-Cyclopenten-1-one, 2-chloro-4-(3,7-dimethyl-6-octen-1-yl)-4-hydroxy-5-(4-pyridinylmethylene)- (CA INDEX NAME)

RN 157121-56-7 HCAPLUS

CN 2-Cyclopenten-1-one, 2-chloro-4-(6-cyclohexylhexyl)-4-hydroxy-5-[[4-[3-hydroxy-2-(hydroxymethyl)propyl]phenyl]methylene]- (CA INDEX NAME)



L43 ANSWER 12 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1990:76680 HCAPLUS Full-text

DOCUMENT NUMBER: 112:76680

ORIGINAL REFERENCE NO.: 112:13095a,13098a

TITLE: Synthesis of 10-halogenated clavulone derivatives AUTHOR(S): Iguchi, Kazuo; Kaneta, Soichiro; Tsune, Chieko;

Yamada, Yasuji

CORPORATE SOURCE: Tokyo Coll. Pharm., Tokyo, 192-03, Japan SOURCE: Chemical & Pharmaceutical Bulletin (1989),

37(5), 1173-5

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 112:76680

ED Entered STN: 03 Mar 1990

GΙ

- AB Epoxidn. of clavulone II with Me3COOH gave the (10R,11S)-epoxide (I) stereoselectively. Haloclavulones II (R=Cl,Br,iodo) were obtained from I and LiR and II (R=F) with KF-HF.
- IT 111695-42-2P 111695-43-3P 125159-68-4P 125159-69-5P 125159-70-8P 125159-71-9P 125159-72-0P
- RN 111695-42-2 HCAPLUS
- CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(4R,5E,7E,12\alpha,14Z)$  (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

- RN 111695-43-3 HCAPLUS
- CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-10-fluoro-12-hydroxy-9-oxo-, methyl ester,  $(4R,5E,7E,12\alpha,14Z)$  (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

- RN 125159-68-4 HCAPLUS
- CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(4R,5E,7Z,12\alpha,14Z)$  (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 125159-69-5 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-10-bromo-12-hydroxy-9-oxo-, methyl ester,  $(4R,5E,7E,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 125159-70-8 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-10-bromo-12-hydroxy-9-oxo-, methyl ester,  $(4R,5E,7Z,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

$$AcO$$
 $E$ 
 $CH2)4$ 
 $Me$ 

RN 125159-71-9 HCAPLUS

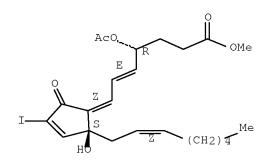
CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-12-hydroxy-10-iodo-9-oxo-, methyl ester, (4R,5E,7E,12 $\alpha$ ,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 125159-72-0 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-12-hydroxy-10-iodo-9-oxo-, methyl ester,  $(4R,5E,7Z,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.



L43 ANSWER 13 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1989:632451 HCAPLUS Full-text

DOCUMENT NUMBER: 111:232451

ORIGINAL REFERENCE NO.: 111:38605a,38608a

TITLE: Preparation of punaglandin derivatives PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_ \_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_ JP 1986-76213 JP 62234060 19871014 19860401 <--PRIORITY APPLN. INFO.: GB 1985-8422 A 19850401 <--

OTHER SOURCE(S): CASREACT 111:232451

ED Entered STN: 23 Dec 1989

GI

AB The title compds. I (R1-R3 = lower alkyl), useful as potential anticancer agents, are prepared from II (R4 = hydroxy-protecting group). Dehydration of Me 5,6-(isopropylidenedioxy)-7-hydroxy-7-[(2R)-2-methoxymethoxy-2-octyl- 4-chloro-5-oxo-3-cyclopenten-1-yl]heptanoate (preparation given), followed by dealkylation, acetylation, and deprotection, gave III.

IT 102354-92-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as potential anticancer agent)

RN 102354-92-7 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7E,12 $\alpha$ )- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

C1 CH2) 7 OH OAC (CH2) 3 OMe

L43 ANSWER 14 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1989:553507 HCAPLUS Full-text

DOCUMENT NUMBER: 111:153507

ORIGINAL REFERENCE NO.: 111:25581a,25584a

TITLE: Alkynylcyclopentenol derivatives as punaglandin

intermediates and their preparation

INVENTOR(S): Mori, Kenji; Takeuchi, Tei; Yuya, Masakazu; Takeda,

Shigeo

PATENT ASSIGNEE(S): Fuji Chemicals Industrial Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01026529	А	19890127	JP 1987-183042	19870722 <
PRIORITY APPLN. INFO.:			JP 1987-183042	19870722 <

PRIORITY APPLN. INFO.: OTHER SOURCE(S):

MARPAT 111:153507

ED Entered STN: 28 Oct 1989

GΙ

The title compds. I (R1 = OH-protecting group; X = halo; R2 = H; the asterisk indicates asym. C), useful as intermediates for antitumor and antiviral punaglandin, were prepared Treatment of HC.tplbond.CMe with BuLi, followed by reaction with (4R)-4-tert-butyldimethylsilyloxy-3-chloro-2- cyclopentenone, gave 84.5% (1R,4S)-1-(tert-butyldimethyl)silyloxy-2-chloro- 4-(2-propynyl)cyclopent-2-en-4-ol.

IT 96055-66-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(intermediates for, preparation of alkynylcyclopentenol derivs. as)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

L43 ANSWER 15 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1989:514961 HCAPLUS Full-text

DOCUMENT NUMBER: 111:114961

ORIGINAL REFERENCE NO.: 111:19271a,19274a

TITLE: Preparation of 1-halo-2,3,4-trioxybutanes as

intermediates for anticancer punaglandin

INVENTOR(S): Mori, Kenji; Takeuchi, Tei; Yuya, Masakazu; Takeda,

Shigeo

PATENT ASSIGNEE(S): Fuji Chemicals Industrial Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01026575	A	19890127	JP 1987-183043	19870722 <
PRIORITY APPLN. INFO.:			JP 1987-183043	19870722 <

OTHER SOURCE(S): MARPAT 111:114961

ED Entered STN: 01 Oct 1989

AB R10CH2CH0R2CH0R3CH2X (I) (R1-R3 = OH-protecting group; OR2R3O = acetal; X = halo), useful as intermediates for anticancer punaglandin, were prepared Reaction of (4S,5S)-4-benzyloxymethyl-5-hydroxymethyl-2,2-dimethyl-1,3-dioxolane with MeSO2Cl, followed by treatment with NaI and addition reaction of the resulting product with CH2:CHCO2Me in the presence of Bu3SnCl and NaBH4 under a Hg lamp, gave (5S,6S)-5,6-isopropylidenedioxy-7-benzyloxyheptanoic acid Me ester.

IT 96055-66-2

RL: RCT (Reactant); RACT (Reactant or reagent)
 (intermediates for, halotrioxybutanes as)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

$$C1$$
 $E$ 
 $CH_2)_4$ 
 $E$ 
 $OAC$ 
 $OMe$ 
 $OAC$ 
 $OMe$ 
 $OAC$ 
 $OMe$ 

L43 ANSWER 16 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1989:434116 HCAPLUS Full-text

DOCUMENT NUMBER: 111:34116

ORIGINAL REFERENCE NO.: 111:5737a,5740a

TITLE: Cytotoxic action of prostaglandins on human

retinoblastoma cell line, Y-79

AUTHOR(S): Nakamura, Masao; Koshihara, Yasuko; Mochizuki, Manabu;

Masuda, Kanjiro

CORPORATE SOURCE: Dep. Ophthalmol., Asahi-Chuou Hosp., Chiba, 289-25,

Japan

SOURCE: Atarashii Ganka (1989), 6(4), 569-75

CODEN: ATGAEX; ISSN: 0910-1810

DOCUMENT TYPE: Journal LANGUAGE: Japanese ED Entered STN: 05 Aug 1989

GΙ

AB Cultured Y-79 cells produced no detectable PGD2, PGE2, PGF2 $\alpha$ , thromboxane B2, or 6-oxo-PGF1 $\alpha$ , suggesting the absence of an endogenous self-regulatory system of prostaglandins in Y-79 cell growth in vitro. Exogenously added PGE1, PGE2, and PGF2 $\alpha$  had no effects on Y-79 cell growth in vitro at concns. of 1-20  $\mu$ g/mL. However, PGA1, PGA2, PGD2, PGJ2, and especially 64E (I), inhibited cell growth. S.c. injection of 2-4 mg PGD2/kg/day suppressed and 4 mg I/kg/day strongly suppressed the in vivo growth of retinoblastoma in the nude mouse.

IT 114247-16-4

RL: PROC (Process)

(cytotoxic action of, on human retinoblastoma)

RN 114247-16-4 HCAPLUS

CN Prosta-5,7,10-trien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(5E,7E,12\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

C1 
$$E$$
  $(CH_2)$   $CH_2$   $OMe$ 

L43 ANSWER 17 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1989:107604 HCAPLUS Full-text

DOCUMENT NUMBER: 110:107604

ORIGINAL REFERENCE NO.: 110:17587a,17590a

TITLE: Structure requirements for antiproliferative and

cytotoxic activities of marine coral prostanoids from the Japanese stolonifer Clavularia viridis against

human myeloid leukemia cells in culture

AUTHOR(S): Honda, Atsushi; Mori, Yo; Iguchi, Kazuo; Yamada,

Yasuji

CORPORATE SOURCE: Dep. Biochem., Tokyo Coll. Pharm., Hachioji, 192-03,

Japan

SOURCE: Prostaglandins (1988), 36(5), 621-30

CODEN: PRGLBA; ISSN: 0090-6980

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 03 Apr 1989

AB The structure-antiproliferative and cytotoxic activity relationships of marine coral prostanoids from Japanese stolonifer C. viridis and related compds. were

examined in HL-60 cells in culture. The alkylidenecyclopentenone structure in these prostanoids was required for the antiproliferative and cytotoxic activities against HL-60 cells, but the epoxy prostanoids without crossconjugated cyclopentenone system also had the activities. The presence of the OH group at the C-12 position in the prostanoids enhanced the activities, but the stereospecificity of the 12-OH group was not required for the activities. Introduction of halogen atom at the C-10 position of the prostanoids potentiated the activities (Cl > Br = I > H). Introduction of groups for blocking  $\beta$ -oxidation to the  $\alpha$ -side chain of the prostanoids did not increase the activities. The presence of dienone (C5-6 and C7-8) in the structure potentiated the activities. The results provide the basis for designing a new class of antitumor agent from marine coral prostanoids.

IT 100295-81-6, Chlorovulone I 105343-03-1, Iodovulone I 105343-04-2, Bromovulone I 111695-42-2

RL: PRP (Properties)

(cytotoxicity of, to human myeloid leukemia cells, structure in relation to)

RN 100295-81-6 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 105343-03-1 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 12-hydroxy-10-iodo-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

$$E$$
OH
$$CH_2)_4$$
 $E$ 
OH
$$CH_2)_4$$
 $E$ 
OH

RN 105343-04-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-bromo-12-hydroxy-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Br 
$$E$$
 OH  $CH_2$ ) 4  $E$  OH

RN 111695-42-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(4R,5E,7E,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

L43 ANSWER 18 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:597063 HCAPLUS Full-text

DOCUMENT NUMBER: 109:197063

ORIGINAL REFERENCE NO.: 109:32509a,32512a

TITLE: Prolonged survival time of sarcoma 180-bearing mice

treated with lipid microspheres-entrapped antitumor

marine coral prostanoids

AUTHOR(S): Honda, Atsushi; Mori, Yo; Yamada, Yasuji; Nakaike,

Shiro; Hayashi, Hidefumi; Otomo, Susumu

CORPORATE SOURCE: Dep. Biochem., Tokyo Coll. Pharm., Hachioji, 192-03,

Japan

SOURCE: Research Communications in Chemical Pathology and

Pharmacology (1988), 61(3), 413-16

CODEN: RCOCB8; ISSN: 0034-5164

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 25 Nov 1988

AB Antitumor marine coral prostanoids (clavulone II and chlorovulone I) were entrapped into lipid microspheres of 0.2 µm diameter to make lipo-drugs. Daily treatment with lipo-chlorovulone I (1.6 mg/kg/day, i.p.) and lipo-clavulone II (12.5 mg/kg/day, i.p.) on days 1 through 5 markedly prolonged the survival time (135 and 73% ILS, resp.) of mice inoculated with sarcoma 180 as compared with that of a corresponding dose of resp. free chlorovulone I and clavulone II. Thus, the lipid microspheres may be used as drug delivery carriers for antitumor coral prostanoids in vivo.

IT 100295-81-6, Chlorovulone I

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

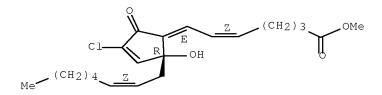
(marine coral, lipid microspheres containing, antitumor activity of)

RN 100295-81-6 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl

ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.



L43 ANSWER 19 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:549198 HCAPLUS Full-text

DOCUMENT NUMBER: 109:149198

ORIGINAL REFERENCE NO.: 109:24803a,24806a

TITLE: Preparation of fluorocyclopentenone derivatives as

anticancer agents

INVENTOR(S): Hasato, Atsuo; Kurozumi, Seiji; Suzuki, Masaaki;

Noyori, Ryoji

PATENT ASSIGNEE(S): Teijin Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63072672	A	19880402	JP 1986-217255	19860917 <
PRIORITY APPLN. INFO.:			JP 1986-217255	19860917 <

OTHER SOURCE(S): MARPAT 109:149198

ED Entered STN: 28 Oct 1988

GΙ

$$F \xrightarrow{Q} R^{4} R^{5}$$

$$R^{2}$$

$$QR^{6}$$

$$R^{2}$$

$$QR^{6}$$

$$R^{2}$$

$$R^{2}$$

$$QR^{6}$$

$$R^{2}$$

$$R^{2}$$

$$QR^{6}$$

$$R^{2}$$

$$R^{2}$$

$$QR^{6}$$

$$R^{2}$$

$$R^{3}$$

$$R^{4}$$

$$R^{2}$$

$$R^{2}$$

$$R^{3}$$

$$R^{4}$$

$$R^{3}$$

$$R^{4}$$

$$R^{5}$$

$$R^{2}$$

$$R^{2}$$

$$R^{2}$$

$$R^{3}$$

$$R^{4}$$

$$R^{3}$$

$$R^{4}$$

$$R^{4}$$

$$R^{5}$$

$$R^$$

AB The title compds. I [R1 = (substituted) C1-10 alkyl; R2 = (substituted) alkyl, alkenyl; R3 = H, tri(C1-7)hydrocarbylsilyl, group forming acetal bond with O of OH group; R4 = H; R5 = OH; R4R5 = bond], useful as anticancer agents (no

data), were prepared from cyclopentenone II [R6 = tri(C1-7)hydrocarbylsilyl, group forming acetal bond with O of OH group] and cyclopentenone III. Aldol condensation of II (R2 = octyl, R6 = Me3Si) with Me 7-oxoheptanoate, followed by dehydration and deprotection, gave title compds. (E)- and (Z)-IV.

IT 116752-44-4P 116752-45-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of, as anticancer agent)

RN 116752-44-4 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-fluoro-12-hydroxy-9-oxo-, methyl ester, (7E,12\xi)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 116752-45-5 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-fluoro-12-hydroxy-9-oxo-, methyl ester,  $(72,12\xi)$ - (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$(CH_2) \xrightarrow{O} OMe$$

$$(CH_2) \xrightarrow{Me} Me$$

L43 ANSWER 20 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:528635 HCAPLUS Full-text

DOCUMENT NUMBER: 109:128635

ORIGINAL REFERENCE NO.: 109:21417a,21420a

TITLE: Preparative bioorganic chemistry. 9. Synthesis of

punaglandin 4 by means of enzymatic resolution of the

key chlorocyclopentene derivative

AUTHOR(S): Mori, Kenji; Takeuchi, Tadashi

CORPORATE SOURCE: Dep. Agric. Chem., Univ. Tokyo, Tokyo, 113, Japan

SOURCE: Tetrahedron (1988), 44(2), 333-42 CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 109:128635

ED Entered STN: 14 Oct 1988

GΙ

AB Punaglandin (I) a chlorinated marine prostanoid, was synthesized from (+)-tartaric acid and (1S, 4R)-(-)-4-tert-butyldimethylsilyloxy-3-chloro-2-cyclopenten-1-ol, which was prepared by asym. hydrolysis of the  $(\pm)$ -acetate with pig pancreatic lipase.

IT 96055-68-4P

RN 96055-68-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

$$C1$$
 $R$ 
 $CCH_2)$ 
 $CCH_2)$ 
 $CCH_2)$ 
 $CCH_2)$ 
 $CCH_2)$ 
 $CCH_2)$ 
 $CCH_2$ 
 $CCH_2$ 

IT 96055-66-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (total synthesis of)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$C1$$
 $R$ 
 $OAC$ 
 $OAC$ 
 $OMe$ 
 $OAC$ 
 $OAC$ 
 $OMe$ 
 $OAC$ 
 $O$ 

L43 ANSWER 21 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:454569 HCAPLUS Full-text

DOCUMENT NUMBER: 109:54569
ORIGINAL REFERENCE NO.: 109:9191a,9194a

TITLE: Preparation of prostaglandins as antitumor agents

PATENT ASSIGNEE(S): Teijin Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 43 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				_	
JP 62096438	A	19870502	JP 1986-108664		19860514 <
JP 06043360	В	19940608			
US 4711895	A	19871208	US 1985-791156		19851022 <
PRIORITY APPLN. INFO.:			US 1985-791156	Α	19851022 <
			JP 1984-220475	Α	19841022 <
			JP 1984-220476	Α	19841022 <
			JP 1985-28429	Α	19850218 <
			JP 1985-130845	Α	19850618 <

OTHER SOURCE(S): CASREACT 109:54569

ED Entered STN: 19 Aug 1988

GΙ

The title compds. I [X = H, halo; A = H and B = OH, or AB = bond; R1 = (substituted) C1-10 alkyl, alkenyl, alkynyl; R2 = (substituted) C1-10 alkyl, alkenyl, alkynyl, but R2  $\neq$  2-octenyl, 8-acetoxy-2-octenyl, 2,5-octadienyl; R3 = H, protecting group], useful as antitumor agents, are prepared from II (R5R6 = bond). Treatment of II (X = C1; R2 = 3,7-dimethyloctyl; R3 = Me3Si; R5R6 = bond) (preparation given) with LDA/THF at -45°, followed by addition of MeO2C(CH2)5CHO in THF at -45° gave 50% I (X = C1; A = H; B = OH; R1 = MeO2C(CH2)2; R2 = 3,7-dimethyloctyl; R3 = Me3Si), which in pyridine was treated with MsC1, followed by addition of DBU to afford 30% (Z)-I (AB = bond) (III) and 52% (E)-III. (E)-III showed IC50 of 0.025  $\mu$ g/mL against leukemia L1210 cells.

IT 104248-48-8P 104248-51-3P 104248-75-1P 114499-39-7P 114531-75-8P 114531-78-1P 114531-79-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of, as antitumor agent)

RN 104248-48-8 HCAPLUS

CN 3-Cyclopentene-1-heptanoic acid, 3-chloro-5-[3-(3,4-

dimethoxyphenyl)propyl]- $\zeta$ ,5-dihydroxy-2-oxo-, methyl ester (CA INDEX NAME)

RN 104248-51-3 HCAPLUS

CN Heptanoic acid, 7-[4-chloro-2-[3-(3,4-dimethoxyphenyl)propyl]-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene]-, methyl ester (CA INDEX NAME)

RN 104248-75-1 HCAPLUS

CN 2-Cyclopenten-1-one, 2-chloro-5-(3,7-dimethyl-2,6-octadien-1-ylidene)-4-hydroxy-4-(4-phenoxybutyl)- (CA INDEX NAME)

RN 114499-39-7 HCAPLUS

CN 2-Cyclopenten-1-one, 2-chloro-5-(4,7-dihydroxy-2-hepten-1-ylidene)-4-hydroxy-4-(4-phenoxybutyl)- (CA INDEX NAME)

RN 114531-75-8 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 114531-78-1 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-15,19-dimethyl-9-oxo-, methyl ester, (7Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

$$C1$$
 $R$ 
 $CH_2)$   $S$ 
 $CHMe 2$ 

RN 114531-79-2 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-15,19-dimethyl-9-oxo-, methyl ester, (7E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

C1 
$$E$$
 (CH2) 5 OMe  $CH_2$ ) 3  $CHMe_2$ 

L43 ANSWER 22 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:454513 HCAPLUS Full-text

DOCUMENT NUMBER: 109:54513

ORIGINAL REFERENCE NO.: 109:9183a,9186a

TITLE: Total syntheses of clavulones and punaglandins AUTHOR(S): Sasai, Hiroaki; Ogawa, Yuji; Iwasaki, Genji; Sano,

Mami; Sodeoka, Mikiko; Shibasaki, Masakatsu

CORPORATE SOURCE: Fac. Pharm. Sci., Hokkaido Univ., Japan

SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (

1987), 29, 409-16

CODEN: TYKYDS

DOCUMENT TYPE: Journal LANGUAGE: Japanese ED Entered STN: 19 Aug 1988

AB A report from a symposium describing the total syntheses of marine eicosanoids

(+)-clavulone II and (+)-punaglandin 4.

IT 96055-66-2P, (+)-Punaglandin 4

RL: SPN (Synthetic preparation); PREP (Preparation)

(total synthesis of)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

L43 ANSWER 23 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:437539 HCAPLUS Full-text

DOCUMENT NUMBER: 109:37539
ORIGINAL REFERENCE NO.: 109:6346h,6347a

TITLE: Preparation of 5-(carboxyalkenyl)-2-halo-4-hydroxy-2-

cyclopentenones as antitumor agents

INVENTOR(S): Nakamoto, Yasumasa; Ishizuka, Yoriyasu; Miyamura,

Yoshio; Togashi, Masahiro; Nagai, Zene; Tsuji,

Shunichi; Morikawa, Susumu

PATENT ASSIGNEE(S): Nihon Iyakuhin Kogyo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 62129245 A 19870611 JP 1985-268397 19851130 <-PRIORITY APPLN. INFO.: JP 1985-268397 19851130 <--

OTHER SOURCE(S): CASREACT 109:37539

ED Entered STN: 05 Aug 1988

GI

The title compds. [I; X = halo; R = H, CO2R3; R3 = (unbranched) alkyl, cycloalkyl, (unsubstituted) Ph; R1 = H, lower alkyl; R2 = H, protecting group; R4 = OH or H where C-5 and C-1' are linked with a double or single bond resp.; A = CH2, O, S], useful as antitumor agents, were prepared A solution of 2-chloro-4-hydroxy-4-methoxycarbonyl-2-cyclopentenone in THF was added dropwise at -60° to a mixture of Me3SiNHSiMe3 and BuLi in THF and after 20 min, Bu3SnCl was added, followed by warming to -20°. A solution of OHC(CH2)5CO2Me in THF was added at -60° and the mixture was stirred for 30 min to give 76% I (X = Cl, R = CO2Me, R1 = Me, R2 = H, R4 = OH; C-2' and C-3' being linked with a double bond; A = CH2) which was treated with MeSO2Cl in CH2Cl2 containing Et3N to give 25.6% I (R4 = H, other variables as defined above) (II). II inhibited the growth of L1210 mouse leukemia cells with an IC50 of 0.05 μg/mL.

IT 107836-95-3P 107836-96-4P 114011-01-7P 114011-02-8P 114011-03-9P 114011-04-0P 114011-05-1P 114011-06-2P 114011-14-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as antitumor agent)

RN 107836-95-3 HCAPLUS

CN

2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, methyl ester (CA INDEX NAME)

RN 107836-96-4 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(7-methoxy-7-oxo-2-hepten-1-ylidene)-4-oxo-, methyl ester (CA INDEX NAME)

RN 114011-01-7 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-fluoro-1-hydroxy-5-[1-hydroxy-4-(2-methoxy-2-oxoethoxy)butyl]-4-oxo-, methyl ester (CA INDEX NAME)

RN 114011-02-8 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-fluoro-1-hydroxy-5-[4-(2-methoxy-2-oxoethoxy)butylidene]-4-oxo-, methyl ester (CA INDEX NAME)

RN 114011-03-9 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-fluoro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, methyl ester (CA INDEX NAME)

RN 114011-04-0 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-fluoro-1-hydroxy-5-(7-methoxy-7-oxo-2-hepten-1-ylidene)-4-oxo-, methyl ester (CA INDEX NAME)

RN 114011-05-1 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-bromo-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, methyl ester (CA INDEX NAME)

114011-06-2 HCAPLUS RN

2-Cyclopentene-1-carboxylic acid, 3-bromo-1-hydroxy-5-(7-methoxy-7-oxo-2-CN hepten-1-ylidene)-4-oxo-, methyl ester (CA INDEX NAME)

114011-14-2 HCAPLUS RN

2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-[4-[(2-methoxy-2-CN oxoethyl)thio]butylidene]-4-oxo-, methyl ester (CA INDEX NAME)

L43 ANSWER 24 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:422686 HCAPLUS Full-text

DOCUMENT NUMBER: 109:22686

ORIGINAL REFERENCE NO.: 109:3865a,3868a

TITLE: Synthetic studies on marine prostanoids

AUTHOR(S): Kosugi, Hirafumi; Watanabe, Yasuyuki; Konta, Hiroshi;

Uda, Hisashi

CORPORATE SOURCE: Chem. Res. Inst. Non-Aqueous Solutions, Tohoku Univ.,

Japan

SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (

1987), 29, 417-24

CODEN: TYKYDS

DOCUMENT TYPE: Journal LANGUAGE: Japanese ED Entered STN: 22 Jul 1988

AB A report from a symposium describing the total synthesis of marine prostanoids

clavulone II, clavulone III, and chlorovulone II.

IT 100295-80-5P, Chlorovulone II

RL: SPN (Synthetic preparation); PREP (Preparation)

(total synthesis of)

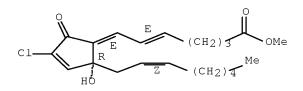
RN 100295-80-5 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl

ester, (5E,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 25 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:406130 HCAPLUS Full-text

DOCUMENT NUMBER: 109:6130

ORIGINAL REFERENCE NO.: 109:1153a,1156a

TITLE: A process for the preparation of 3-fluoro-4-hydroxy-2-

cyclopentenone derivatives as intermediates for

fluoropunaglandins

INVENTOR(S): Hasato, Atsuo; Kurozumi, Seiji; Suzuki, Masaaki;

Noyori, Ryoji

PATENT ASSIGNEE(S): Teijin Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 62242640	A	19871023	JP 1986-84961	19860415 <
	JP 06004555	В	19940119		
PRIORITY APPLN. INFO.:			JP 1986-84961	19860415 <	
ED	Entered STN: 09 Ju	1 1988			
GI					



The title compds. [I; X = F; R = H, tri(C1-7 alkyl)silyl, or forming an acetal], 4R-, 4S-I or their mixts., useful as intermediates for fluorinated punaglandins and other 5-membered ring compds., were prepared A solution of KF and 18-crown-6 ether was stirred 30 min, I (X = Cl, R = tetrahydropyranyl) was added, and the mixture was stirred 12 h at room temperature to give 25% I (X = F, R = tetrahydropyranyl).

IT 96055-66-2D, fluorinated

RL: RCT (Reactant); RACT (Reactant or reagent)

(intermediate for, fluorohydroxycyclopentenone derivative as)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

C1 
$$R$$
  $OAC$   $OAC$   $OMe$   $OAC$   $OAC$   $OMe$   $OAC$   $OAC$ 

L43 ANSWER 26 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:221488 HCAPLUS Full-text

DOCUMENT NUMBER: 108:221488

ORIGINAL REFERENCE NO.: 108:36350h,36351a

TITLE: Preparation of punaglandin derivatives

INVENTOR(S): Noyori, Ryoji; Suzuki, Masaaki; Morita, Yasushi;

Yanaqisawa, Akira

PATENT ASSIGNEE(S): Teijin Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	NO.	KIND	DATE	APPLICATION	ON NO.	DATE	
JP 622	07254	 A	19870911	JP 1986-48	 8516	19860307	<
JP 060	55716	В	19940727				
PRIORITY APPLN. INFO.:				JP 1986-48	8516	19860307	<
ED Entere	d STN: 24 Ju	ın 1988					
GI							

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title compds. I (R1 = C1-10 alkyl; R2 = H, OH-protecting group; A is H, B is OH, or AB = bond; \* indicates asym. C), II, and III, useful as potential anticancer and antiviral agents, were prepared from IV and V. Condensation of enone VI (preparation given) and aldehyde VII (preparation given), followed by dehydration of the product, gave 37% dienone VIII.

IT 105927-55-7P 105927-56-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as potential anticancer and antiviral agent)

RN 105927-55-7 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(5S,6S,7Z,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

C1 
$$\frac{\text{OAc}}{\text{S}}$$
  $\frac{\text{OAc}}{\text{CH}_2}$   $\frac{\text{OMe}}{\text{CH}_2}$   $\frac{\text{Me}}{\text{CH}_2}$ 

RN 105927-56-8 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(5S,6S,7E,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

L43 ANSWER 27 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:186211 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 108:186211

ORIGINAL REFERENCE NO.: 108:30575a,30578a

TITLE: Preparation of 2-halo-2-cyclopenten-1-one derivatives

as antitumor agents

INVENTOR(S): Nakamoto, Yasumasa; Ishizuka, Yoriyasu; Miyamura,

Yoshio; Togashi, Masahiro; Nagai, Zene; Tsuji,

Shunichi; Morikawa, Susumu

PATENT ASSIGNEE(S): Nihon Iyakuhin Kogyo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

GΙ

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62114933	A	19870526	JP 1985-252825	19851113 <
PRIORITY APPLN. INFO.:		JP 1985-252825	19851113 <	
ED Entered STN: 28 Ma	ay 1988			

The title compds. (I; X = halo; R1 = H, alkyl; R2 = acyloxy; R4 = H, OH-protecting group; R = alkyl, CO2R3; R3 = alkyl, cycloalkyl, PhCH2; Q = H on unsatd., OH on saturated bond) and their pharmaceutically acceptable salts, useful as antitumor agents, are prepared. To a mixture of 0.41 mL (Me3Si)2NH in THF and 10% LiBu in hexane at -50°, were successively added at -60° with stirring 0.408 g cyclopentenone II [X = C1, R = Me, R4 = tetrahydropyranyl (THP)] in THF, 0.504 mL Bu3SnCl in THF, and then 0.380 g formylhexenoate (4R)-III (R1 = Me, R2 = AcO) in THF at -65° to -20° and the resulting mixture was treated with 30 mL saturated aqueous NH4Cl at 0° to give 0.230 g I (X = C1, R = R1 = Me, R2 = AcO, R4 = THP, Q = H), which (0.220 g) in DME was deprotected with a drop of 6N HCl at 25° to give 0.064 g I (X = C1, R = R1 = Me, R2 = AcO, R4 = H, Q = H) which showed IC50 of 0.04  $\mu$ g/mL against L-1210 mouse leukemia cells.

IT 113922-70-6P 113922-71-7P 113922-72-8P 113922-73-9P 113922-74-0P 113947-25-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as neoplasm inhibitor)

RN 113922-70-6 HCAPLUS

CN 5-Heptenoic acid, 4-(acetyloxy)-7-(4-chloro-2-hydroxy-2-methyl-5-oxo-3-cyclopenten-1-ylidene)-, methyl ester (CA INDEX NAME)

RN 113922-71-7 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 5-[4-(acetyloxy)-7-methoxy-7-oxo-2-

hepten-1-ylidene]-3-chloro-1-hydroxy-4-oxo-, methyl ester (CA INDEX NAME)

RN 113922-72-8 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 5-[4-(acetyloxy)-1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl]-3-fluoro-1-hydroxy-4-oxo-, methyl ester (CA INDEX NAME)

RN 113922-73-9 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 5-[4-(acetyloxy)-7-methoxy-7-oxo-2-hepten-1-ylidene]-3-fluoro-1-hydroxy-4-oxo-, methyl ester (CA INDEX NAME)

RN 113922-74-0 HCAPLUS

CN 5-Heptenoic acid, 4-(acetyloxy)-7-(4-chloro-2-hydroxy-2-methyl-5-oxo-3-cyclopenten-1-ylidene)- (CA INDEX NAME)

RN 113947-25-4 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 5-[4-(acetyloxy)-1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl]-3-chloro-1-hydroxy-4-oxo-, methyl ester (CA INDEX NAME)

L43 ANSWER 28 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:180821 HCAPLUS Full-text

DOCUMENT NUMBER: 108:180821

ORIGINAL REFERENCE NO.: 108:29560h,29561a

TITLE: In vivo effects of prostaglandins on human

retinoblastoma cells in nude mice

AUTHOR(S): Nakamura, Masao; Fujino, Yujiro; Mochizuki, Manabu;

Minoda, Kensei; Masuda, Kenjiro

CORPORATE SOURCE: Sch. Med., Univ. Tokyo, Tokyo, 113, Japan

SOURCE: Japanese Journal of Ophthalmology (1987),

31(4), 608-20

CODEN: JJOPA7; ISSN: 0021-5155

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 28 May 1988

GΙ

AB PGD2 and 64 E (I), a prostaglandin derivative, were tested for their capacity to suppress the growth of retinoblastoma in the nude mouse. Ten million cells of an established cell line of human retinoblastoma, Y-79 cells, were transferred s.c. into the nude mouse, and after the transferred cells became a tumor with a diameter >7.5 mm, either PGD2 (1, 2, or 4 mg/kg/day) or I (4 mg/kg/day) dissolved in Hanks' solution was daily injected s.c. near the tumor for 14 days. The estimated tumor weight as defined by the formula of (length) + (width)2/2 was evaluated at various time intervals after the treatment. Although a low dose of PGD2, 1 mg/kg/day, had no effect, higher doses of PGD2 had a clear effect in suppressing the growth of retinoblastoma in the nude mouse. Tumors in I-treated animals were also markedly suppressed in their growth. Histol. examination revealed that tumors treated with these drugs had a much larger area of necrosis with fewer tumor cells than the tumors in control animals.

IT 114247-16-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antitumor activity of, in retinoblastoma of human)

RN 114247-16-4 HCAPLUS

CN Prosta-5,7,10-trien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(5E,7E,12\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

C1 
$$E$$
  $(CH_2)$   $Me$   $OMe$ 

L43 ANSWER 29 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:180820 HCAPLUS Full-text

DOCUMENT NUMBER: 108:180820

ORIGINAL REFERENCE NO.: 108:29557a,29560a

TITLE: In vitro effects of prostaglandins on human

retinoblastoma cell line Y-79 cells

AUTHOR(S): Nakamura, Masao; Koshihara, Yasuko; Fujino, Yujiro; Mochizuki, Manabu; Minoda, Kensei; Masuda, Kanjiro

Mochizuki, Mahabu, Minoda, Kensei, Masuda, Ke

CORPORATE SOURCE: Sch. Med., Univ. Tokyo, Tokyo, 113, Japan SOURCE: Japanese Journal of Ophthalmology (1987),

31(4), 598-607

CODEN: JJOPA7; ISSN: 0021-5155

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 28 May 1988

GΙ

AB An established retinoblastoma cell line, Y-79, was investigated for its capacity to synthesize prostaglandins (PGs) and its susceptibility to PGs and their derivs., 64 E (I), exogenously given. The capacity of Y-79 cells to produce PGs was estimated by TLC using [1-14C] arachidonic acid as a substrate, and it was found that no detectable amts. of PGD2, PGE2, PGF2 $\alpha$ , thromboxane B2, or 6-keto PGF1 $\alpha$  were produced by Y-79 cells. Furthermore, the effect of exogenously given PGs (PGA1, A2, D2 E1, E2, F2 $\alpha$ , and J2) and I on the cell proliferation of Y-79 cells in culture were examined PGE1, E2, and

 $F2\alpha$  showed no effects on the cell growth of Y-79 cells at all tested doses (1-20  $\mu g/mL)$ . On the other hand, PGA1, A2, D2, and J2, and I remarkably inhibited the growth of Y-79 cells. A dose-response study indicated that I was the most effective among these drugs, followed by PGJ2. PGD2, A1, and A2 were less effective than PGJ2. Thus, Y-79 cells do not produce endogenous PGs, and these cells are highly susceptible to exogenous PGs (PGJ2, D2, A1, and A2) as well as I.

IT 114247-16-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antitumor activity of, in retinoblastoma of human)

RN 114247-16-4 HCAPLUS

CN Prosta-5,7,10-trien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(5E,7E,12\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

L43 ANSWER 30 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:112018 HCAPLUS Full-text

DOCUMENT NUMBER: 108:112018

ORIGINAL REFERENCE NO.: 108:18329a,18332a

TITLE: Total synthesis of punaglandin 4
AUTHOR(S): Sasai, Hiroaki; Shibasaki, Masakatsu

CORPORATE SOURCE: Sagami Chem. Res. Cent., Sagamihara, Japan SOURCE: Tetrahedron Letters (1987), 28(3), 333-6

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 108:112018

ED Entered STN: 01 Apr 1988

GΙ

- The marine prostanoid, punaglandin 4 (I) was prepared from 1,2-bis(trimethylsiloxy)cyclopentene. In a key sequence, diol II [R = cis-CH2CH:CH(CH2)4Me, R1 = H] was selectively mesylated to give II (R1 = MeSO2). Upon solvolysis in aqueous DMSO, II (R1 = MeSO2) underwent rearrangement to give the isomeric diol III (same R) as a 1:1 mixture of epimers.
- RN 96055-68-4 HCAPLUS
- CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

C1 
$$R$$
  $CH_2)$   $A$   $Me$ 

- RN 105927-55-7 HCAPLUS
- CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(5S,6S,7Z,12\alpha,14Z)$  (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

$$C1$$
 $S$ 
 $CH_2)_3$ 
 $OMe$ 
 $CCH_2)_4$ 
 $OMe$ 

- RN 105927-56-8 HCAPLUS
- CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(5S,6S,7E,12\alpha,14Z)$  (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

C1 
$$\xrightarrow{\text{C}}$$
  $\xrightarrow{\text{C}}$   $\xrightarrow$ 

ΙT 96055-66-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

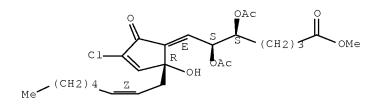
(total synthesis of)

96055-66-2 HCAPLUS RN

Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-CN oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 31 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:55688 HCAPLUS Full-text

DOCUMENT NUMBER: 108:55688

108:9289a,9292a ORIGINAL REFERENCE NO.:

Prostaglandin synthesis 15. Synthesis and structural TITLE:

revision of (7E) - and (7Z) -punaglandin 4

AUTHOR(S): Suzuki, Masaaki; Morita, Yasushi; Yanagisawa, Akira;

> Baker, Bill J.; Scheuer, Paul J.; Noyori, Ryoji Dep. Chem., Nagoya Univ., Nagoya, 464, Japan

CORPORATE SOURCE: Journal of Organic Chemistry (1988), 53(2), SOURCE:

286-95

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 108:55688

Entered STN: 20 Feb 1988 ED

GΙ

AB A convergent synthesis of antineoplastic (7E)- and (7Z)-punaglandin 4, dictates revision of the originally postulated structures, to the stereoisomers, (7E)- and (7Z)-I, resp. Condensation of (R)-3-chloro-4-(tert-butyldimethylsiloxy)-2-cyclopentenone and the Li derivative of CH2:C:C(SnMe3)(CH2)4Me gave after desilylation the crystalline acetylenic diol II. Partial hydrogenation of the triple bond using Lindlar catalyst, followed by oxidation of the secondary alc. with pyridinium dichromate gave the hydroxy enone. The punaglandin skeleton was constructed by aldol condensation of the silyl-protected hydroxycyclopentenone and (2R,3S)-2,3-diacetoxy-6-carbomethoxyhexanal. Dehydration of the aldol product followed by desilylation gave (7E)- and (7Z)-I identical with the naturally occurring sample in all respects. The enantiomers and some other stereoisomers were prepared and exhibit similar inhibitory effects on L1210 leukemia cell proliferation.

IT 103384-65-2P 103384-66-3P 103384-67-4P 103384-68-5P 103531-36-8P 105927-55-7P 105927-56-8P 111901-59-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antitumor activity of)

RN 103384-65-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5R,6R,7E,12 $\alpha$ ,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 103384-66-3 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5R,6R,7Z,12 $\alpha$ ,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

C1 
$$\frac{1}{R}$$
  $\frac{1}{R}$   $\frac$ 

RN 103384-67-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7E,12 $\alpha$ ,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

$$C1$$
 $E$ 
 $OAC$ 
 $OAC$ 
 $OMC$ 
 $O$ 

RN 103384-68-5 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(5S,6R,7Z,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

C1 
$$\frac{\text{OAc}}{\text{R}}$$
  $\frac{\text{OAc}}{\text{CH}_2}$   $\frac{\text{OMe}}{\text{CH}_2}$   $\frac{\text{Me}}{\text{CH}_2}$ 

RN 103531-36-8 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

C1 
$$R$$
 OAC  $CH2)$  4  $Z$  OMC  $CH2)$  4  $Z$ 

105927-55-7 HCAPLUS RN

Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-CN oxo-, methyl ester, (5S,6S,7Z,12 $\alpha$ ,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

105927-56-8 HCAPLUS RN

Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-CN oxo-, methyl ester,  $(5S,6S,7E,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

$$C1$$
 $E$ 
 $S$ 
 $OAC$ 
 $OMC$ 
 $OMC$ 

RN 111901-59-8 HCAPLUS

Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-CN oxo-, methyl ester, (5S,6R,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 96055-66-2P 96055-68-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (preparation, photochem. isomerization, and antitumor activity of)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

C1 
$$R$$
 OH OAC  $CH_2$ ) 4  $R$  OH

RN 96055-68-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

C1 
$$R$$
  $CH_2)$   $Me$ 

L43 ANSWER 32 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:35031 HCAPLUS Full-text

DOCUMENT NUMBER: 108:35031

ORIGINAL REFERENCE NO.: 108:5809a,5812a

TITLE: A new marine epoxy prostanoid with an

antiproliferative activity from the stolonifer

Clavularia viridis Quoy and Gaimard

AUTHOR(S): Iguchi, Kazuo; Kaneta, Soichiro; Mori, Kenichiro;

Yamada, Yasuji

Tokyo Coll. Pharm., Hachioji, 192-03, Japan CORPORATE SOURCE: SOURCE:

Chemical & Pharmaceutical Bulletin (1987),

35(10), 4375-6

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal English LANGUAGE: Entered STN: 06 Feb 1988 ΕD

GΙ

AΒ A new marine epoxy prostanoid (I) with an antiproliferative activity was isolated from the Japanese stolonifer C. viridis. The structure of I was established on the basis of spectroscopy and chemical transformation.

ΙT 100295-81-6

RL: RCT (Reactant); RACT (Reactant or reagent)

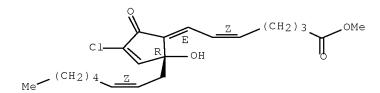
(epoxidn. of)

100295-81-6 HCAPLUS RN

Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl CN ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 33 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:214 HCAPLUS Full-text

DOCUMENT NUMBER: 108:214 ORIGINAL REFERENCE NO.: 108:31a,34a

TITLE: Antiproliferative and cytotoxic effects of newly

> discovered halogenated coral prostanoids from the Japanese stolonifer Clavularia viridis on human

myeloid leukemia cells in culture

AUTHOR(S): Honda, Atsushi; Mori, Yo; Iguchi, Kazuo; Yamada,

Yasuji

CORPORATE SOURCE: Dep. Biochem., Tokyo Coll. Pharm., Hachioji, 192-03,

Japan

SOURCE: Molecular Pharmacology (1987), 32(4), 530-5

CODEN: MOPMA3; ISSN: 0026-895X

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 09 Jan 1988

The antiproliferative and cytotoxic activities of newly discovered halogenated AΒ coral prostanoids (chlorovulone, bromovulone, and iodovulone) from the Japanese stolonifer C. viridis and their related compds. were determined in HL-60 cells in culture. The order of antiproliferative and cytotoxic activities of naturally occurring marine prostanoids against HL-60 cells was chlorovulone I > bromovulone I = iodovulone I > clavulone I or II > PGA2. The IC50 (concentration required to inhibit cell growth by 50%) value (0.03  $\mu M$ (0.01  $\mu g/mL$ )) and cytotoxic effects (>0.3  $\mu M$  (0.1  $\mu g/mL$ )) of chlorovulone I were about 200 and 100 times stronger than those of PGA2, resp., on the molar basis. From the data on the structure-activity relationship of the halogenated coral prostanoids and the related compds., it was determined that the alkylidencyclopentenone structure in these prostanoids was essential for the antiproliferative and cytotoxic activities against HL-60 cells and the introduction of halogen function at C-10 position in the structure enhanced the activities (Cl = F > Br = I > H), that the stereospecificity of the 12hydroxyl group in the chlorovulone mol. was not required for the activities, and that the presence of dienone (C5-6 and C7-8) in the structure potentiated the activities. Bivariate DNA/bromodeoxyuridine anal. with a flow cytometer showed that chlorovulone I transiently arrested the cell cycle progression from G1 to S after 24-h exposure to the nontoxic concns. (0.03 and 0.09  $\mu M$ ) and caused the lasting blockade of leukemia cells in G1 at the cytotoxic concentration Apparently, these coral prostanoids and related compds. may be a promising antileukemic agent.

IT 100295-81-6, Chlorovulone I 105343-03-1, Iodovulone I
105343-04-2, Bromovulone I 105560-77-8, (-)-Chlorovulone
II 111695-42-2 111695-43-3

RL: BIOL (Biological study)

(leukemia from human growth inhibition by)

RN 100295-81-6 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 105343-03-1 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 12-hydroxy-10-iodo-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 105343-04-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-bromo-12-hydroxy-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

Br 
$$E$$
 OH  $CH_2)_4$   $E$  OH

RN 105560-77-8 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(5E,7E,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

$$C1 \xrightarrow{E} (CH_2) \xrightarrow{S} OMe$$

$$C1 \xrightarrow{E} (CH_2) \xrightarrow{A} Me$$

RN 111695-42-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(4R,5E,7E,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

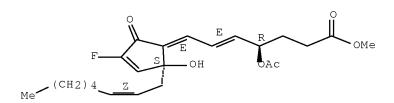
C1 
$$E$$
  $E$   $OMe$   $OMe$ 

RN 111695-43-3 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 4-(acetyloxy)-10-fluoro-12-hydroxy-9-oxo-, methyl ester,  $(4R,5E,7E,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 34 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1987:439505 HCAPLUS Full-text

DOCUMENT NUMBER: 107:39505 ORIGINAL REFERENCE NO.: 107:6599a,6602a

TITLE: Preparation of punaglandin derivatives

INVENTOR(S): Noyori, Ryoji; Suzuki, Masaaki; Kurozumi, Seiji

PATENT ASSIGNEE(S): Teijin Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GI

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62059258	A	19870314	JP 1985-197688	19850909 <
PRIORITY APPLN. INFO.:			JP 1985-197688	19850909 <
OTHER SOURCE(S):	CASREA	CT 107:39505		
ED Entered STN: 08 Au	a 1987			

Punaglandin derivs. (I; R1 = C1-10 alkyl; R2 = H, protecting group; A = H when B = OH, AB = bond), useful as anticancer and antiviral agents, are prepared (Me2CH)2NLi (0.4M) in THF was added to a solution of 0.36 mmol enone derivative II in THF at -78°, followed by 0.37 mmol HCOCH(OAc)CH(OAc)(CH2)3CO2Me in THF, cooled to -95°, and adjusted to pH 7.4 with phosphate buffer to give a mixture of 2 diastereomers I (A = H, B = OH, R1 = Me, R2 = Me3Si) in 13% and 4% yield, resp., which was dehydrated to give 37% dienone derivative I (AB = bond, R1 = Me, R2 = Me3Si) (III). Hydrolysis of 1.8 mg III in HOAc-H2O-THF at 0-30° gave a mixture of 0.5 mg (E)- and 0.8 mg (Z)-I (AB = bond, R1 = Me, R2 = H; isomeric about C-7-8).

IT 105927-55-7P 105927-56-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as anticancer and antiviral agent)

RN 105927-55-7 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(5S,6S,7Z,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

C1 
$$\frac{\text{OAc}}{\text{S}}$$
  $\frac{\text{OAc}}{\text{CH}_2}$   $\frac{\text{OMe}}{\text{CH}_2}$   $\frac{\text{Me}}{\text{CH}_2}$ 

RN 105927-56-8 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(5S,6S,7E,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

L43 ANSWER 35 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1987:423115 HCAPLUS Full-text

DOCUMENT NUMBER: 107:23115

ORIGINAL REFERENCE NO.: 107:3899a,3902a

TITLE: Synthesis of antitumor marine prostanoids

AUTHOR(S): Nagaoka, Hiroto; Yamada, Yasuji

CORPORATE SOURCE: Tokyo Coll. Pharm., Hachioji, 192-03, Japan

SOURCE: Yuki Gosei Kagaku Kyokaishi (1986), 44(12),

1145-54

CODEN: YGKKAE; ISSN: 0372-770X

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese ED Entered STN: 25 Jul 1987

AB A review with 27 refs. (mostly since 1980) on synthesis of antitumor marine

prostamoids, clavulones, chlorovulones, and punaglandins 3 and 4.

IT 96055-65-1P, Punaglandin 3 96055-66-2P, Punaglandin 4

RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of) 96055-65-1 HCAPLUS

RN 96055-65-1 HCAPLUS CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-

hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

C1 
$$R$$
  $OH$   $OAC$   $OMC$   $OMC$ 

 ${\tt L43}$   $\,$  ANSWER 36 OF 51  $\,$  HCAPLUS  $\,$  COPYRIGHT 2008 ACS on STN  $\,$ 

ACCESSION NUMBER: 1987:175830 HCAPLUS Full-text

DOCUMENT NUMBER: 106:175830

ORIGINAL REFERENCE NO.: 106:28525a,28528a

TITLE: 2-Halo-2-cyclopentenone derivatives as antitumor

agents

INVENTOR(S): Nakamoto, Yasumasa; Ishizuka, Yoriyasu; Miyamura,

Yoshio; Togashi, Masahiro; Nagai, Zene; Tsuji,

Shunichi; Morikawa, Susumu

PATENT ASSIGNEE(S): Nihon Iyakuhin Kogyo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

----JP 62000044 A 19870106 JP 1985-136767 19850625 <-PRIORITY APPLN. INFO.: JP 1985-136767 19850625 <--

ED Entered STN: 29 May 1987

GΙ

2-Halo-2-cyclopentenone derivs. (I; X = halo; R = alkyl, alkoxycarbonyl, etc.; R1 = H, alkyl; R2 = H, alkyl, protecting group; Q = OH with single bond, H with double bond), useful as antitumor agents, are prepared Cyclopentenone derivative II in THF was treated with BuLi in hexane and hexamethyldisilazane in THF at -70 to -20°. Bu3SnCl and Me 7-oxo-5-heptenoate in THF at -60 to - 55° were added to give 43.8% I (X = Cl, R = Et, R1 = Me, R2 = H, Q = OH, single bond). In vitro screening tests using L1210 mouse leukemia cells showed that I had IC50 values ranging from 0.04-2.70 µg/mL.

IT 107836-91-9P 107836-92-0P 107836-93-1P 107836-94-2P 107836-95-3P 107836-96-4P 107836-98-6P 107836-99-7P 107837-01-4P 107837-02-5P 107837-03-6P 107837-04-7P 107837-08-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as antitumor agent)

RN 107836-91-9 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, ethyl ester (CA INDEX NAME)

RN 107836-92-0 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(7-methoxy-7-oxo-2-hepten-1-ylidene)-4-oxo-, ethyl ester (CA INDEX NAME)

RN 107836-93-1 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, butyl ester (CA INDEX NAME)

$$n-BuO$$

OH

OH

CH—
CH—
CH—
(CH<sub>2</sub>) 3—
C—
OMe

RN 107836-94-2 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(7-methoxy-7-oxo-2-hepten-1-ylidene)-4-oxo-, butyl ester (CA INDEX NAME)

$$n-BuO-C$$
OH
 $CH-CH-CH-(CH_2)_3-C$ 
OMe

RN 107836-95-3 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, methyl ester (CA INDEX NAME)

RN 107836-96-4 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(7-methoxy-7-oxo-2-hepten-1-ylidene)-4-oxo-, methyl ester (CA INDEX NAME)

RN 107836-98-6 HCAPLUS

CN Prosta-5,7,10-trien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(12\xi)$ - (9CI) (CA INDEX NAME)

Double bond geometry unknown.

$$C1 \xrightarrow{\text{O}} (CH_2) \xrightarrow{\text{Me}} OMe$$

RN 107836-99-7 HCAPLUS

CN Prosta-5,7,10-trien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, (12 $\xi$ )- (9CI) (CA INDEX NAME)

Double bond geometry unknown.

$$C1$$
 $HO$ 
 $(CH_2)$ 
 $T$ 
 $Me$ 
 $CO_2H$ 
 $CO_2H$ 

RN 107837-01-4 HCAPLUS

CN 5-Heptenoic acid, 7-(2-butyl-4-chloro-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene)-, methyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{N-Bu} & \text{OH} \\ \text{CH-CH-CH-CH-(CH2)} & 3 \\ \end{array} \begin{array}{c} \text{O} \\ \text{C-OMe} \end{array}$$

CN 5-Heptenoic acid, 7-(2-butyl-4-chloro-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene)- (CA INDEX NAME)

RN 107837-03-6 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, phenylmethyl ester (CA INDEX NAME)

RN 107837-04-7 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(7-methoxy-7-oxo-2-hepten-1-ylidene)-4-oxo-, phenylmethyl ester (CA INDEX NAME)

RN 107837-08-1 HCAPLUS

CN 5-Heptenoic acid, 7-(4-chloro-2-hydroxy-2-methyl-5-oxo-3-cyclopenten-1-ylidene)-, methyl ester (CA INDEX NAME)

IT 107836-91-9P 107836-93-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as intermediate for antitumor cyclopentenone derivs.)  ${\rm RN} - 107836 - 91 - 9 \ {\rm HCAPLUS}$ 

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, ethyl ester (CA INDEX NAME)

RN 107836-93-1 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, butyl ester (CA INDEX NAME)

IT 107836-95-3P 107836-98-6P 107837-01-4P 107837-03-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as intermediate for antitumor halocyclopentenones)

RN 107836-95-3 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, methyl ester (CA INDEX NAME)

RN 107836-98-6 HCAPLUS

CN Prosta-5,7,10-trien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(12\xi)$ - (9CI) (CA INDEX NAME)

Double bond geometry unknown.

$$C1$$
 $(CH_2)$ 
 $T$ 
 $Me$ 
 $(CH_2)$ 
 $T$ 
 $OMe$ 

RN 107837-01-4 HCAPLUS

CN 5-Heptenoic acid, 7-(2-butyl-4-chloro-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene)-, methyl ester (CA INDEX NAME)

RN 107837-03-6 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(1-hydroxy-7-methoxy-7-oxo-2-hepten-1-yl)-4-oxo-, phenylmethyl ester (CA INDEX NAME)

L43 ANSWER 37 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1987:119344 HCAPLUS Full-text

DOCUMENT NUMBER: 106:119344

ORIGINAL REFERENCE NO.: 106:19486h,19487a

TITLE: 2-Halo-5-(6-carboxyhexylidene)-2-cyclopentenone

analogs

INVENTOR(S): Nakamoto, Yasumasa; Ishizuka, Yoriyasu; Miyamura,

Yoshio; Togashi, Masahiro; Fujii, Masahiro; Kato, Yuichi; Nagai, Zene; Tsuji, Shunichi; Morikawa,

Susumu; Ohira, Yutaka

PATENT ASSIGNEE(S): Nihon Iyakuhin Kogyo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 61205230 A 19860911 JP 1985-45735 19850309 <-PRIORITY APPLN. INFO.: JP 1985-45735 19850309 <--

ED Entered STN: 17 Apr 1987

GΙ

$$X \longrightarrow_{R^{20}}^{CO_{2}R^{1}} \qquad X \longrightarrow_{R^{20}}^{OH} \qquad X \longrightarrow_{R^{20}}^{OH}$$

The title compds. [I; R = alkyl, alkoxycarbonyl; R1 = H, lower alkyl; R2 = H, acyl, tetrahydropyran-2-yl (THP), tetrahydrofuran-2-yl; X = halo; Z = CH2, O, S], useful as anticancer agents, were prepared via aldol condensation of 2-halo-2-cyclopentenone derivs. with OHC(CH2)3ZCH2CO2R1 (II; R1 = lower alkyl) and dehydration of the resulting cyclopentenone derivs. III. Thus, a solution of 4-n-butyl-2-chloro-4-(tetrahydropyran-2- yloxy)-2-cyclopentenone in THF was added dropwise at -55° to a mixture of Me3SiNHSiMe3 and n-BuLi in THF and after 0.5 h at -30°, II (Z = O; R1 = Me) in THF was added to the mixture The resulting mixture was allowed to react at -50° to -30° for 1 h to give 35.6% III (R = H, R1 = Me, R2 = THP, X = C1, Z = O). Treatment of this with MeSO2Cl in CH2Cl containing Et3N at room temperature for 1 h gave 40% I (R = H, R1 = Me, R2 = THP, X = C1, Z = O). I at  $0.06-0.10~\mu g/mL$  in vitro inhibited by 50% the growth of mouse leukemia cells L1210.

IT 107008-54-8P 107032-64-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and dehydration of)

RN 107008-54-8 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-[1-hydroxy-4-(2-methoxy-2-oxoethoxy)butyl]-4-oxo-, methyl ester (CA INDEX NAME)

RN 107032-64-4 HCAPLUS

CN 3-Cyclopentene-1-heptanoic acid, 3-chloro- $\zeta$ , 5-dihydroxy-5-(methoxycarbonyl)-2-oxo-, methyl ester (CA INDEX NAME)

102355-12-4P 107008-39-9P 107008-40-2P ΙT 107008-46-8P 107008-49-1P 107008-51-5P 107008-52-6P 107008-53-7P 107008-55-9P 107008-57-1P 107008-59-3P 107008-61-7P 107008-62-8P 107008-77-5P 107032-62-2P 107032-63-3P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as anticancer agent) 102355-12-4 HCAPLUS RN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, CN  $(7E, 12\xi) - (9CI)$  (CA INDEX NAME)

Double bond geometry as shown.

C1 
$$E$$
  $(CH_2)$   $T$   $Me$   $OMe$ 

RN 107008-39-9 HCAPLUS
CN Acetic acid, [4-(2-butyl-4-chloro-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene)butoxy]-, methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

C1 
$$E$$
 (CH<sub>2</sub>)  $3$  OMe

RN 107008-40-2 HCAPLUS CN Acetic acid, [4-(2-buty1-4-chloro-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene)butoxy]-, (E)- (9CI) (CA INDEX NAME)

$$C1$$

$$E$$

$$(CH2)3 O CO2H$$

$$Bu-n$$

RN 107008-46-8 HCAPLUS

CN Heptanoic acid, 7-(2-butyl-4-chloro-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene)-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 107008-49-1 HCAPLUS

CN Heptanoic acid, 7-(4-chloro-2-hydroxy-2-methyl-5-oxo-3-cyclopenten-1-ylidene)-, methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 107008-51-5 HCAPLUS

CN Acetic acid, [4-(4-chloro-2-hydroxy-2-methyl-5-oxo-3-cyclopenten-1-ylidene) butoxy]-, methyl ester, (E)- (9CI) (CA INDEX NAME)

RN 107008-52-6 HCAPLUS

CN Acetic acid, [4-(4-chloro-2-hydroxy-2-methyl-5-oxo-3-cyclopenten-1-ylidene) butoxy]-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 107008-53-7 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-(7-methoxy-7-oxoheptylidene)-4-oxo-, methyl ester (CA INDEX NAME)

RN 107008-55-9 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-[4-(2-methoxy-2-oxoethoxy)butylidene]-4-oxo-, methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 107008-57-1 HCAPLUS

CN Acetic acid, [[4-(4-chloro-2-hydroxy-2-octyl-5-oxo-3-cyclopenten-1-ylidene)butyl]thio]-, methyl ester, (E)- (9CI) (CA INDEX NAME)

$$C1$$
 $E$ 
 $(CH_2)$ 
 $S$ 
 $OMe$ 
 $OMe$ 

RN 107008-59-3 HCAPLUS

CN Acetic acid, [4-(4-chloro-2-hydroxy-2-octyl-5-oxo-3-cyclopenten-1-ylidene) butoxy]-, methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$C1$$
 $E$ 
 $(CH_2)$ 
 $Me$ 
 $OMe$ 

RN 107008-61-7 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-[4-[(2-methoxy-2-oxoethyl)thio]butylidene]-4-oxo-, methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 107008-62-8 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-[4-[(2-methoxy-2-oxoethyl)thio]butylidene]-4-oxo-, methyl ester, (Z)- (9CI) (CA INDEX NAME)

RN 107008-77-5 HCAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 3-chloro-1-hydroxy-5-[4-(2-methoxy-2-oxoethoxy)butylidene]-4-oxo-, methyl ester, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 107032-62-2 HCAPLUS

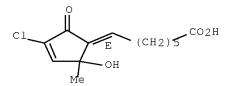
CN Acetic acid, [[4-(2-butyl-4-chloro-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene)butyl]thio]-, methyl ester, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$C1$$
 $E$ 
 $(CH_2)$ 
 $S$ 
 $OMe$ 
 $OMe$ 

RN 107032-63-3 HCAPLUS

CN Heptanoic acid, 7-(4-chloro-2-hydroxy-2-methyl-5-oxo-3-cyclopenten-1-ylidene)-, (E)- (9CI) (CA INDEX NAME)



L43 ANSWER 38 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1987:13065 HCAPLUS Full-text

DOCUMENT NUMBER: 106:13065

ORIGINAL REFERENCE NO.: 106:2157a,2160a

TITLE: Antitumor eicosanoids: natural occurrence and drug

design

AUTHOR(S): Fukushima, M.

CORPORATE SOURCE: Dep. Intern. Med., Aichi Cancer Cent., Nagoya, Japan SOURCE: Recent Adv. Chemother., Proc. Int. Congr. Chemother.,

14th (1985), Volume Anticancer Sect. 1,

25-7. Editor(s): Ishigami, Joji. Univ. Tokyo Press:

Tokyo, Japan.
CODEN: 55GNAX
Conference

DOCUMENT TYPE: Conference
LANGUAGE: English
ED Entered STN: 24 Jan 1987

AB The antitumor activities of alkylidenecyclopentenone prostaglandins, such as  $\Delta7\text{-PGA1}$  [92340-58-4] and  $\Delta12\text{-}13,14\text{-}dihydro\text{-PGJ2}$  [97588-64-2], and the marine eicosanoids, clavilones and prostaglandins, were compared and structure-activity relations were determined. The results indicated that the cyclopentenone ring was required for antitumor activity, and cytotoxicity could be potentiated by the presence of 10-Cl and 12-OH groups. Both 10-Cl and 12-OH groups were required to produce full cytotoxicity. The cytotoxicity of 10-Cl,12-OH- $\Delta7$ -PGA1 [ 105801-34-1] was almost equal to that of vincristine or doxorubicin, and this structure may serve as the basis of a new class of antitumor agents.

IT 105801-34-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(neoplasm-inhibiting activity of, structure in relation to)

RN 105801-34-1 HCAPLUS

CN Prosta-7,10,13-trien-1-oic acid, 10-chloro-12,15-dihydroxy-9-oxo-, (7E,13E,15S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L43 ANSWER 39 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1987:4706 HCAPLUS Full-text

DOCUMENT NUMBER: 1987:4706 HCAPLU 1987:4706 HCAPLU

ORIGINAL REFERENCE NO.: 106:879a,882a

TITLE: Studies on marine natural products. XIII.

Determination of absolute configuration of chlorovulones by CD measurement and by

enantioselective synthesis of (-)-chlorovulone II Nagaoka, Hiroto; Iguchi, Kazuo; Miyakoshi, Tohru;

Yamada, Nobuko; Yamada, Yasuji

CORPORATE SOURCE: Tokyo Coll. Pharm., Hachioji, 192-03, Japan

SOURCE: Tetrahedron Letters (1986), 27(2), 223-6

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 106:4706

ED Entered STN: 11 Jan 1987

GΙ

AUTHOR(S):

AB Absolute configuration of chlorovulones I-IV (I) new halogenated marine prostanoids with antitumor activity, isolated from the stolonifer Clavularia viridis Quoy and Gaimard, has been established on the basis of the CD measurements of chlorovulone derivs. and of the enantioselective synthesis of (-)-chlorovulone II (E,E-I).

IT 100201-69-2, Chlorovulone IV 100295-79-2, Chlorovulone III 100295-80-5, Chlorovulone II 100295-81-6,

Chlorovulone I

RL: PRP (Properties)

(mol. structure of)

RN 100201-69-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 100295-79-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

$$C1$$
 $R$ 
 $CCH_2)$ 
 $CCH_2)$ 
 $CCH_2)$ 
 $CCH_2)$ 
 $CCH_2)$ 
 $CCH_2)$ 

RN 100295-80-5 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

$$C1$$
 $E$ 
 $CH_2)_3$ 
 $Me$ 
 $CH_2)_4$ 
 $Me$ 

RN 100295-81-6 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

C1 
$$\xrightarrow{E}$$
 OH  $\xrightarrow{C}$  (CH2) 3 OMe

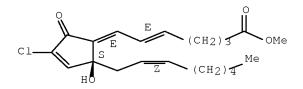
IT 105560-77-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(total synthesis of) RN 105560-77-8 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(5E,7E,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.



L43 ANSWER 40 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1986:623048 HCAPLUS Full-text

DOCUMENT NUMBER: 105:223048

ORIGINAL REFERENCE NO.: 105:35963a,35966a

TITLE: Bromovulone I and iodovulone I, unprecedented

brominated and iodinated marine prostanoids with antitumor activity isolated from the Japanese stolonifer Clavularia viridis Quoy and Gaimard

AUTHOR(S): Iguchi, Kazuo; Kaneta, Soichiro; Mori, Kenichiro;

Yamada, Yasuji; Honda, Atsushi; Mori, Yo

CORPORATE SOURCE: Lab. Org. Chem., Tokyo Coll. Pharm., Tokyo, 192-03,

Japan

SOURCE: Journal of the Chemical Society, Chemical

Communications (1986), (12), 981-2 CODEN: JCCCAT; ISSN: 0022-4936

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 26 Dec 1986

GΙ

R CO<sub>2</sub>Me Me

AB Bromovulone I and iodovulone I (I, R = Br or I, resp.), were isolated from Et2O exts. of C. viridis and their structures were determined by spectral means. Both compds. showed good antiproliferative and cytotoxic activity in human promyelocytic leukemia cells in vitro.

IT 105343-03-1 105343-04-2

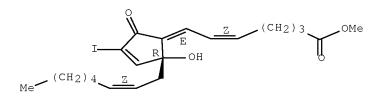
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(from stolonifer, structure and antitumor activity of)

RN 105343-03-1 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 12-hydroxy-10-iodo-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

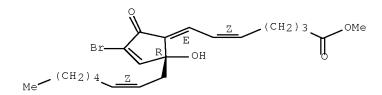


RN 105343-04-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-bromo-12-hydroxy-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L43 ANSWER 41 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1986:614107 HCAPLUS Full-text

DOCUMENT NUMBER: 105:214107

ORIGINAL REFERENCE NO.: 105:34437a,34440a

TITLE: Antiinflammatory method

INVENTOR(S): Mynderse, Jon S.; Bonjouklian, Rosanne

PATENT ASSIGNEE(S): Eli Lilly and Co., USA

SOURCE: U.S., 5 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE		APPLICATION NO.	DATE
US 4612330	A	19860916	US 1985-697997	19850204 <
PRIORITY APPLN. INFO.:			US 1985-697997	19850204 <

ED Entered STN: 13 Dec 1986

AB Punaglandin-1 and Punaglandin-2 are effective in treating inflammation and arthritis. The compds. may be administered by various routes including oral, rectal, transdermal, s.c., i.v., i.m., or intranasal. Thus, a hard gelatin capsule contained Punaglandin-1 250, dried starch 200; and Mg stearate 10 mg.

IT 96055-63-9 96055-64-0

RL: BIOL (Biological study)

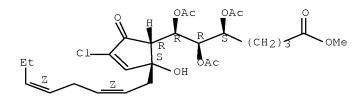
(inflammation inhibitor)

RN 96055-63-9 HCAPLUS

CN Prosta-10,14,17-trien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



RN 96055-64-0 HCAPLUS

CN Prosta-10,14-dien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

L43 ANSWER 42 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1986:572100 HCAPLUS Full-text

DOCUMENT NUMBER: 105:172100

ORIGINAL REFERENCE NO.: 105:27725a,27728a

TITLE: Prostaglandin synthesis. 12. Synthesis of (7E) - and

(7Z)-punaglandin 4. Structural revision

AUTHOR(S): Suzuki, M.; Morita, Y.; Yanagisawa, A.; Noyori, R.;

Baker, Bill J.; Scheuer, Paul J.

CORPORATE SOURCE: Dep. Chem., Nagoya Univ., Nagoya, 464, Japan SOURCE: Journal of the American Chemical Society (1986

), 108(16), 5021-2

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 105:172100

ED Entered STN: 15 Nov 1986

GΙ

AB Punaglandin 4 was shown to have structure I (and the Z isomer) by total synthesis of all relevant diastereoisomers and comparison with the natural product. The crystal structure of cyclopentenedione II was determined

IT 96055-66-2P 96055-68-4P 105927-55-7P

105927-56-8P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and absolute configuration of)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 96055-68-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$C1$$
 $R$ 
 $CH_2)$ 
 $ACO$ 
 $CH_2)$ 
 $ACO$ 
 $CH_2)$ 
 $ACO$ 
 $CH_2$ 
 $ACO$ 
 $ACO$ 

RN 105927-55-7 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9oxo-, methyl ester,  $(5S,6S,7Z,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

105927-56-8 HCAPLUS RN

Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-CN oxo-, methyl ester,  $(5S,6S,7E,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

103384-65-2P 103384-66-3P 103384-67-4P ΙT

103384-68-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(total synthesis of)

103384-65-2 HCAPLUS RN

Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-CN

oxo-, methyl ester,  $(5R, 6R, 7E, 12\alpha, 14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 103384-66-3 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(5R,6R,7Z,12\alpha,14Z)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 103384-67-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7E,12 $\alpha$ ,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

$$C1$$
 $E$ 
 $OAC$ 
 $OAC$ 
 $OMC$ 
 $OAC$ 
 $O$ 

RN 103384-68-5 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7Z,12 $\alpha$ ,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

IT 96055-66-2P 96055-68-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (total synthesis of, revision of punaglandin configuration in relation

to)

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 96055-68-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

L43 ANSWER 43 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1986:572099 HCAPLUS Full-text

DOCUMENT NUMBER: 105:172099

ORIGINAL REFERENCE NO.: 105:27725a,27728a

TITLE: Synthesis of punaglandin 3 and 4. Revision of the

structures

AUTHOR(S): Nagaoka, Hiroto; Miyaoka, Hiroaki; Miyakoshi, Thu;

Yamada, Yasuji

CORPORATE SOURCE: Tokyo Coll. Pharm., Tokyo, 192-03, Japan

SOURCE: Journal of the American Chemical Society (1986

), 108(16), 5019-21

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 105:172099

ED Entered STN: 15 Nov 1986

GΙ

AB Total chiral synthesis of all relevant diastereoisomers established the structures of punaglandins 3 and 4 as I and II, resp., instead of the C-12(S) isomers, as proposed earlier.

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

$$C1$$
 $E$ 
 $CH_2)$   $4$ 
 $E$ 
 $OAC$ 
 $OAC$ 

RN 103384-67-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7E,12 $\alpha$ ,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 103531-36-8 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

IT 96055-65-1P 96055-66-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(total synthesis of)

RN 96055-65-1 HCAPLUS

CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

L43 ANSWER 44 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1986:533647 HCAPLUS Full-text

DOCUMENT NUMBER: 105:133647

ORIGINAL REFERENCE NO.: 105:21561a,21564a

TITLE: Antitumor 4-hydroxy-2-cyclopentenones

INVENTOR(S): Hazato, Atsuo; Sugiura, Satoshi; Kurozumi, Seizi;

Noyori, Ryoji

PATENT ASSIGNEE(S): Teijin Ltd., Japan SOURCE: Eur. Pat. Appl., 66 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PATENT NO.	KIND DATE		APPLICATION NO.		DATE
	EP 180399	A2	19860507	EP 1985-307631	_	19851022 <
	EP 180399	A3	19870616			
	EP 180399	B1	19920520			
	R: CH, DE, FR,	GB, IT	, LI, SE			
	JP 61100542	A	19860519	JP 1984-220475		19841022 <
	JP 02020616	В	19900510			
	JP 61100538	A	19860519	JP 1984-220476		19841022 <
	JP 61189245	A	19860822	JP 1985-28429		19850218 <
	JP 04019214	В	19920330			
	JP 61291538	A	19861222	JP 1985-130845		19850618 <
	JP 06035422	В	19940511			
PRIOR	RITY APPLN. INFO.:			JP 1984-220475	Α	19841022 <
				JP 1984-220476	A	19841022 <
				JP 1985-28429	A	19850218 <
				JP 1985-130845	A	19850618 <

OTHER SOURCE(S): CASREACT 105:133647; MARPAT 105:133647

ED Entered STN: 18 Oct 1986

GΙ

$$X \xrightarrow{\bigcirc A} \xrightarrow{B} R1$$

AB Cyclopentenones I [X = H, halo; A = H; B = OH, AB = bond; R1 = C1-10 (un)substituted alkyl, alkenyl, alkynyl; R2 = C1-10 (un)substituted alkyl, alkenyl, alkynyl; R3 = H, OH-protective group when R2 ≠ 2-octenyl, 8-acetoxy-2-octenyl, 2,5-octadienyl], useful as antitumor agents, are prepared Thus, (E)- and (Z)-2-chloro-4-hydroxy-5-(6- methoxycarbonylhexylidene)-4-octyl-2-cyclopentenone were prepared in 6 steps from 3-chloro-4-tert-butyldimethylsilyloxy-2-cyclopentenone and Me(CH2)7MgBr. The IC50 (inhibitory concentration) of 2-chloro-4-hydroxy-4-[3- (3,4-dimethoxyphenyl)propyl]-2-(6-methoxycarbonylhexylidene)-2- cyclopentenone was 0.06 μg/mL vs. L1210 leukemia cells in vitro.

IT 102355-12-4P 102355-13-5P 104248-43-3P 104248-48-8P 104248-51-3P 104248-75-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of, as antitumor agent)

RN 102355-12-4 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(7E,12\xi)$ - (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$C1$$
 $E$ 
 $(CH_2)$ 
 $Me$ 
 $OMe$ 
 $CH_2)$ 
 $T$ 

RN 102355-13-5 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(72,12\xi)$ - (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$C1$$
 $(CH_2)$ 
 $(CH_2)$ 

RN 104248-43-3 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-15,19-dimethyl-9-oxo-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

$$C1$$
 $R$ 
 $CH2)5$ 
 $OMe$ 
 $CH42)3$ 
 $CHMe2$ 

RN 104248-48-8 HCAPLUS

CN 3-Cyclopentene-1-heptanoic acid, 3-chloro-5-[3-(3,4-dimethoxyphenyl)propyl]- $\zeta$ ,5-dihydroxy-2-oxo-, methyl ester (CA INDEX NAME)

RN 104248-51-3 HCAPLUS

CN Heptanoic acid, 7-[4-chloro-2-[3-(3,4-dimethoxyphenyl)propyl]-2-hydroxy-5-oxo-3-cyclopenten-1-ylidene]-, methyl ester (CA INDEX NAME)

RN 104248-75-1 HCAPLUS

CN 2-Cyclopenten-1-one, 2-chloro-5-(3,7-dimethyl-2,6-octadien-1-ylidene)-4-hydroxy-4-(4-phenoxybutyl)- (CA INDEX NAME)

L43 ANSWER 45 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:406327 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 105:6327

ORIGINAL REFERENCE NO.: 105:1177a,1180a

TITLE: Synthesis of punaglandins and related compounds AUTHOR(S): Suzuki, Masaaki; Morita, Yasushi; Yanagisawa, Akira;

Noyori, Ryoji

CORPORATE SOURCE: Dep. Chem., Nagoya Univ., Japan

SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (

1985), 27th, 397-404

CODEN: TYKYDS

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese ED Entered STN: 13 Jul 1986

AB Review with 12 refs.

IT 96055-63-9P 96055-64-0P 96055-65-1P

96055-66-2P 102355-12-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antitumor activity of)

RN 96055-63-9 HCAPLUS

CN Prosta-10,14,17-trien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 96055-64-0 HCAPLUS

CN Prosta-10,14-dien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 96055-65-1 HCAPLUS

CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 102355-12-4 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(7E,12\xi)$ - (9CI) (CA INDEX NAME)

Double bond geometry as shown.

C1 
$$\xrightarrow{E}$$
  $(CH_2)$   $\xrightarrow{O}$   $OMe$ 

L43 ANSWER 46 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1986:224750 HCAPLUS Full-text

DOCUMENT NUMBER: 104:224750

ORIGINAL REFERENCE NO.: 104:35643a,35646a

TITLE: Prostaglandin chemistry. XXVIII. Synthesis of new

antineoplastic alkylidenecyclopentenones

AUTHOR(S): Sugiura, Satoshi; Hazato, Atsuo; Tanaka, Toshio;

Okamura, Noriaki; Bannai, Kiyoshi; Manabe, Kenji; Kurozumi, Seizi; Suzuki, Masaaki; Noyori, Ryoji

CORPORATE SOURCE: Inst. Bio-Med. Res., Teijin Ltd., Hino, 191, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (1985),

33(9), 4120-3

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 104:224750

ED Entered STN: 27 Jun 1986

GΙ

- AB The clavulone analog I, the punaglandin analog II, and their  $\omega$ -chain-saturated analogs were prepared from, e.g., the cyclopentenones III (R = H, Cl). The compds. had potent growth-inhibiting activity against L1210 tumor cells.
- RN 102355-12-4 HCAPLUS
- CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (7E,12\xi)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$C1 \xrightarrow{\text{E}} (CH_2) \xrightarrow{\text{OMe}} OMe$$

RN 102355-13-5 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(72,12\xi)$ - (9CI) (CA INDEX NAME)

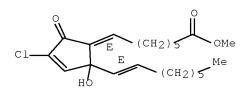
Double bond geometry as shown.

$$C1$$
 $CH_2)$ 
 $CH_2)$ 
 $CH_2$ 
 $CH_2$ 

RN 102419-55-6 HCAPLUS

CN Prosta-7,10,13-trien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(7E,12\xi,13E)$ - (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L43 ANSWER 47 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1986:224749 HCAPLUS Full-text

DOCUMENT NUMBER: 104:224749

ORIGINAL REFERENCE NO.: 104:35643a,35646a

TITLE: Synthesis of a halogenated clavulone analog

AUTHOR(S): Nagaoka, Hiroto; Miyakoshi, Tohru; Kasuga, Junichi;

Yamada, Yasuji

CORPORATE SOURCE: Tokyo Coll. Pharm., Hachioji, 192-03, Japan SOURCE: Tetrahedron Letters (1985), 26(41), 5053-6

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 104:224749

ED Entered STN: 27 Jun 1986

GΙ

AB Chiral 10-chloroclavulone I was prepared via coupling of the key intermediates II and III. I had 10 times the growth inhibiting activity of clavulone II toward melanoma B16 cells.

IT 102354-92-7P

RN 102354-92-7 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7E,12α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

IT 102354-91-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as intermediate for punaglandin derivative)

RN 102354-91-6 HCAPLUS

CN Prosta-7,10-dien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-,  $(5S,6R,7E,12\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

L43 ANSWER 48 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:193175 HCAPLUS Full-text

DOCUMENT NUMBER: 104:193175

ORIGINAL REFERENCE NO.: 104:30483a,30486a

TITLE: Punaglandins and pharmaceutical use thereof

INVENTOR(S): Fukushima, Masanori; Kurozumi, Seizi; Scheuer, Paul

J.; Yu, Patrick T. K.

PATENT ASSIGNEE(S): University of Hawaii, USA SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	TIO 050270C	7.1	10050000		10050014
	WO 8503706 W: JP	A1	19850829	WO 1985-US226	19850214 <
	RW: CH, DE, FR,	GB			
	EP 172233	A1	19860226	EP 1985-901218	19850214 <
	R: CH, DE, FR,	GB, LI			
	JP 61501703	T	19860814	JP 1985-501005	19850214 <
PRIOR	RITY APPLN. INFO.:			US 1984-579933 A	19840214 <
				WO 1985-US226 W	19850214 <

OTHER SOURCE(S): MARPAT 104:193175

ED Entered STN: 01 Jun 1986

GΙ

$$c_1$$
 $c_{0R}$ 
 $c_{0R}$ 
 $c_{0R}$ 
 $c_{0R}$ 

AB Punaglandins I (R1 = H, C1-10 alkyl, or cation; R2-R4 = H, C2-10 acyl) have antitumor activity. Punaglandin 3 (II) and punaglandin 4 (III) (R1 = Me; R2-3 = Ac; R4 = H; double bond for II, single bond for III) are extracted from the Telesto riisei. II and III showed IC50 values of 0.10 and 0.030  $\mu$ g/mL against the proliferation of L 1210 carcinoma cells in culture.

IT 96055-65-1 96055-66-2

RL: PROC (Process)

(isolation of, from Telesto riisei, as neoplasm inhibitor)

RN 96055-65-1 HCAPLUS

CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

C1 
$$\frac{\text{OAc}}{\text{R}}$$
  $\frac{\text{OAc}}{\text{OAc}}$   $\frac{\text{OMe}}{\text{OAc}}$ 

ACCESSION NUMBER: 1986:85634 HCAPLUS Full-text

DOCUMENT NUMBER: 104:85634

ORIGINAL REFERENCE NO.: 104:13541a,13544a

TITLE: Marine natural products. Part XII. Chlorovulones,

new halogenated marine prostanoids with an antitumor activity from the stolonifer Clavularia viridis Quoy

and Gaimard

AUTHOR(S): Iguchi, Kazuo; Kaneta, Soichiro; Mori, Kenichiro;

Yamada, Yasuji; Honda, Atsushi; Mori, Yo

CORPORATE SOURCE: Tokyo Coll. Pharm., Hachioji, 192-03, Japan SOURCE: Tetrahedron Letters (1985), 26(47), 5787-90

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 22 Mar 1986

GΙ

AB New halogenated marine prostanoids, chlorovulone I, II, and III (I-III, resp.) were isolated from the stolonifer C. viridis. The structure elucidation and the antitumor activity of chlorovulones were described.

IT 100201-69-2 100295-79-2 100295-80-5

100295-81-6

RL: BIOL (Biological study)

(of stolonifer, structure of)

RN 100201-69-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 100295-79-2 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

$$C1$$
 $R$ 
 $E$ 
 $CCH_2)$ 
 $CCH_2)$ 
 $CCH_2)$ 
 $CCH_2)$ 
 $CCH_2)$ 
 $CCH_2)$ 
 $CCH_2)$ 

RN 100295-80-5 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5E,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

$$C1$$
 $E$ 
 $CH_2)$ 
 $Me$ 
 $Me$ 
 $CH_2)$ 
 $Me$ 

RN 100295-81-6 HCAPLUS

CN Prosta-5,7,10,14-tetraen-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester, (5Z,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

C1 
$$\frac{Z}{R}$$
 OH  $\frac{Z}{CH_2)}$   $\frac{Z}{A}$  OMe

L43 ANSWER 50 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1985:615067 HCAPLUS Full-text

DOCUMENT NUMBER: 103:215067

ORIGINAL REFERENCE NO.: 103:34655a,34658a

TITLE: 4-Hydroxy-2-cyclopentenone derivatives

PATENT ASSIGNEE(S): Teijin Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60097926	A	19850531	JP 1983-205868	19831104 <
JP 04063056	В	19921008		
PRIORITY APPLN. INFO	).:		JP 1983-205868	19831104 <
ED Entered STN: 2	28 Dec 1985			
GI				

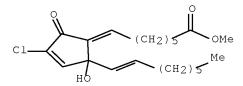
AB Title compds. I [R = H, halo; R1, R2 = H, OH; R1R2 = bond; R3 = H, (un)substituted alkyl, alkenyl, cycloalkyl; R4 = alkyl, cycloalkyl; R5 = H, OH, protected OH; Z = C.tplbond.C, CH:CH, CH2CH2], useful as anticancers and virucides (no data), were prepared Thus, stirring cyclopentenone II (R6 = H) with Me3COOH in benzene gave 10% II (R6 = OH).

IT 99210-09-0P

RN 99210-09-0 HCAPLUS

CN Prosta-7,10,13-trien-1-oic acid, 10-chloro-12-hydroxy-9-oxo-, methyl ester,  $(12\xi)$ - (9CI) (CA INDEX NAME)

Double bond geometry unknown.



L43 ANSWER 51 OF 51 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1985:218647 HCAPLUS Full-text

DOCUMENT NUMBER: 102:218647

ORIGINAL REFERENCE NO.: 102:34255a,34258a

TITLE: Punaglandins: halogenated antitumor eicosanoids from

the octocoral Telesto riisei

AUTHOR(S): Baker, Bill J.; Okuda, Roy K.; Yu, Patrick T. K.;

Scheuer, Paul J.

CORPORATE SOURCE: Dep. Chem., Univ. Hawaii Manoa, Honolulu, HI, 96822,

USA

SOURCE: Journal of the American Chemical Society (1985)

), 107(10), 2976-7

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 29 Jun 1985

GΙ

AB T. riisei Collected in Hawaii contained 4 new eicosanoids, punaglandins 1-4, which bear Cl at C-10. Their structures, including relative stereochem., were determined by spectral and chemical methods. A  $\Delta 7$  constituent, punaglandin 3 (I), inhibited L 1210 leukemia cell proliferation with an half-maximum ID value of 0.02  $\mu g/mL$ .

IT 96055-65-1

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(of coral, antitumor activity and structure of)

RN 96055-65-1 HCAPLUS

CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 96055-63-9 96055-64-0 96055-66-2

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(of coral, structure of)

RN 96055-63-9 HCAPLUS

CN Prosta-10,14,17-trien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 96055-64-0 HCAPLUS

CN Prosta-10,14-dien-1-oic acid, 5,6,7-tris(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6R,7R,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 96055-66-2 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7E,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

C1 
$$R$$
  $OH$   $OAC$   $OMC$   $OMC$ 

IT 96055-67-3P 96055-68-4P

RN 96055-67-3 HCAPLUS

CN Prosta-7,10,14,17-tetraen-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z,17Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 96055-68-4 HCAPLUS

CN Prosta-7,10,14-trien-1-oic acid, 5,6-bis(acetyloxy)-10-chloro-12-hydroxy-9-oxo-, methyl ester, (5S,6S,7Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

# Search History

1 SEA ABB=ON PLU=ON US2005-521570/APPS

L1

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D SCAN
               SEL RN
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L2
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               9/BI OR 143180-75-0/BI OR 155545-33-8/BI OR 155545-34-9/BI OR
               160791-07-1/BI OR 2353-33-5/BI OR 33069-62-4/BI OR 33419-42-0/B
               I OR 458-37-7/BI OR 538-58-9/BI OR 5956-04-7/BI OR 71503-81-6/B
               I OR 73211-11-7/BI OR 7689-03-4/BI OR 79655-73-5/BI OR
               83159-26-6/BI OR 83159-28-8/BI OR 86480-67-3/BI OR 87893-54-7/B
               I OR 89354-63-2/BI OR 9037-42-7/BI OR 96055-64-0/BI OR
               96055-65-1/BI OR 96055-66-2/BI OR 96055-68-4/BI)
L3
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               D SCAN
L4
               STRUCTURE UPLOADED
L5
             0 SEA SSS SAM L4
L6
             0 SEA SSS FUL L4
               STRUCTURE UPLOADED
L7
Γ8
             0 SEA SSS SAM L7
L9
               STRUCTURE UPLOADED
L10
             0 SEA SSS SAM L9
L11
               STRUCTURE UPLOADED
             0 SEA SSS SAM L11
L12
L13
              STRUCTURE UPLOADED
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             0 SEA SSS FUL L11
L15
L16
               STRUCTURE UPLOADED
             3 SEA SSS SAM L16
L17
L18
               STRUCTURE UPLOADED
            12 SEA SSS SAM L18
T.19
               D SCAN
L20
             O SEA ABB=ON PLU=ON L19 AND L2
L21
           242 SEA SSS FUL L18
L22
             5 SEA ABB=ON PLU=ON L21 AND L2
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             STRUCTURE UPLOADED
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          173 SEA SUB=L21 SSS FUL L26
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            5 SEA ABB=ON PLU=ON L28 AND L2
L29
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L32						•			OR PY<=2002)
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L33		STRU	JCTURE UI	PLOADED					
L34		5 SEA	SUB=L21	SSS SAM	L33				
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L39			ABB=ON		L38 AND				
ПЭЭ		I DEA	ADD-UN	FLU-ON	LOO AND	цо /			
L40	FILE	'REGISTRY	' ENTEREI JCTURE UI		55:08 ON	30 SEP	2008		
L41			SUB=L21		T 40				
L42		U SEA	SUB=L21	555 FUL	ь40				
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L43		51 SEA	ABB=ON	PLU=ON	L37 NOT	L39			